

1/9/25, Item #2, Legistar #25006, Diamond Springs Apartments Phase 2 (Design Review DR24-0008)

From Sue Taylor <suetaylor530@gmail.com>

Date Thu 1/23/2025 2:12 AM

To Bob Williams <Bob.Williams@edcgov.us>; Planning Department <planning@edcgov.us>; Patrick Frega <Patrick.Frega@edcgov.us>; David Spaur <David.Spaur@edcgov.us>; Andy Nevis <Andy.Nevis@edcgov.us>; Jeff Hansen <Jeff.Hansen@edcgov.us>

Cc BOS-District IV <bosfour@edcgov.us>; BOS-District I <bosone@edcgov.us>; BOS-District V <bosfive@edcgov.us>; BOS-District II <bostwo@edcgov.us>; BOS-District III <bosthree@edcgov.us>; BOS-Clerk of the Board <edc.cob@edcgov.us>

 1 attachment (1 MB)

SOC comments PC 1-22-25.pdf;

This Message Is From an Untrusted Sender

You have not previously corresponded with this sender.

Report Suspicious

Sorry for my late submission, but please review my comment letter prior to your Planning Commission hearing.

Thank you,
Sue Taylor
530-391-2190

January 22, 2025

El Dorado County Planning Commission
2850 Fairlane Court, Building C Hearing Room
Placerville, CA 95667

Regarding Planning Commission Meeting 1/9/25, Agenda #2, Legistar #25006, Hearing to consider Diamond Springs Apartments Phase 2 (Design Review DR24-0008) request for a Design Review Permit

Dear Commissioners:

We appreciate the opportunity to provide the following comments on behalf of Save Our County ("SOC") and Save Our County Joint Coalition (SOC-JC) regarding the above-reference project and other concerns due to the approval of this project by the majority of the Commission.

We submitted documented county codes and state law references and I, Sue Taylor, made summary comments during the hearing.

I would ask the Planning Commission to take the following actions:

Prior to the minutes being approved a Planning Commissioner can request to bring this project back for reconsideration, based on new facts presented in this document. The simple way to deny this project is that this project consists of a wetland, in which the County cannot use SB35 to approve the apartments. And the project does not meet "objective zoning standards" and the General Plan or State Law. Staff stated that the applicant could not be required to do a traffic study, when staff and the applicant knows that there was already a traffic study prepared for the first part for this project in 2017. I can assure you the traffic has not gotten better since that last study. The project had significant impacts which violate general plan policies and was required to be mitigated. I've attached the traffic study and put the summaries here:

TABLE 13 PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS WITH MITIGATIONS													
Intersection	Control	Existing				Existing Plus Project				Existing Plus Project with Mitigations			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1. Pleasant Valley Road/Racquet Way	SSSC	39	E	191	F	41	E	<u>>300</u>	<u>F</u>	14	B	16	B
6. Missouri Flat Road/China Garden Road (Mitigation – Right-in/Right-out only)	SSSC	49	E	108	F	49	E	<u>111</u>	<u>F</u>	23	C	21	C
Notes: SSSC = side street stop control, AWSC = all way stop control, N/A = Not Applicable (future intersection)													
¹ For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For unsignalized (side street stop controlled) intersections, average intersection delay is reported in seconds per vehicle for the overall intersection (worst movement). All results are rounded to the nearest second.													
Bold text indicates LOS worse than established threshold. <i>Italic and underlined</i> text identifies a potential impact.													
Source: Fehr & Peers, 2015													

Even though I do not agree with these findings (see the lawyers notes below the cumulative plus project analysis), they were made for "Phase one", and to comply with objective zoning standards and the general plan, the mitigation (even though inadequate to comply with capacity policies in the General Plan) from that study must be required:

CUMULATIVE PLUS PROJECT

Cumulative plus project conditions analysis results, presented in Tables 10 and 12, indicate that the addition of the project would exacerbate unacceptable operations at two intersections. The following discusses these impacts and associated mitigations. Table 14 summarizes the AM and PM peak hour intersection operations under cumulative plus project conditions with proposed mitigation.

INTERSECTIONS

Impacts

- Impact 3 - Pleasant Valley Road/Racquet Way (Intersection 1) – This intersection will operate at LOS F without the project during the AM and PM peak hours. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the AM and PM peak hours. **This is a significant impact.**
- Impact 4 - Missouri Flat Road/China Garden Road (Intersection 6) – This intersection will operate at LOS F without the project during the AM and PM peak hours. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the AM and PM peak hours. **This is a significant impact.**
- Impact 5 - Missouri Flat Road/Forni Road (Intersection 12) – This intersection will operate at LOS F without the project during the PM peak hour. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the AM and PM peak hours. However, the County’s General Plan allows this section of Missouri Flat Road to operate at LOS F up to a v/c ratio of 1.20. The two-way PM peak hour volume for Missouri Flat Road (Mother Lode Drive to Diamond Springs Parkway) is 3,300 vehicles per hour. The peak-hour roadway capacity for a four-lane divided arterial is 3,740 vehicles per hour (El Dorado County General Plan EIR, Table 5.4-1). The resulting v/c ratio is 0.88. As a result, this is not a project impact. **This is a less than significant impact.**

Mitigation

- Mitigation 3 - Pleasant Valley Road/Racquet Way (Intersection 1) – Implement one of the following improvements:
- Install traffic signal control at the Pleasant Valley Road/Racquet Way intersection. With traffic signal control, the intersection would operate acceptably at LOS C and LOS D operation during the AM and PM peak hours, respectively.



The Cumulative analysis includes planned roadway improvements, growth consistent with the 2004 General Plan, and with approved and reasonably foreseeable projects within the study area. This is found to be an impact in the cumulative scenario without the project, which includes other foreseeable but unapproved projects. Therefore, the project is responsible for its proportional share of the proposed mitigation under cumulative conditions. Since the impact is identified under the cumulative scenario, the timing of the improvement is a function of the rate of population and employment growth. The County's traffic impact mitigation fee program provides a mechanism for collecting fair share contributions for improvements in the 2015 CIP.

The CIP includes a line item for unprogrammed traffic signal installation and operational and safety improvements at intersections, including improvements like construction of new traffic signals, construction of turn pockets, and the upgrade of existing traffic signal systems. The County annually monitors intersections with potential need for improvement through the Intersection Needs Prioritization Process. The Intersection Needs Prioritization Process is then used to inform the annual update to the CIP, and potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

Appropriate mitigation, as determined by the CDA, would include payment of traffic impact mitigation fees to satisfy the project's fair share obligation towards this improvement or construction of the improvement with reimbursement or fee credit for costs that exceed the project's proportional share if the improvement is needed but not included in future updates to the CIP or constructed by others. The project's proportional share of traffic entering the intersection is about 3.0 percent.

OR

- Provide a public road connection to Diamond Road, by way of Black Rice Road, and maintain side street stop control at the Diamond Road/Black rice Road/Lime Kiln Road intersection.

With either of these improvements, this impact would be **less than significant**.

Mitigation 4 - Missouri Flat Road/China Garden Road (Intersection 6) – Implementation of one of the following improvements:

- Install traffic signal control at the Missouri Flat Road/China Garden Road intersection. With traffic signal control, the intersection would operate acceptably at LOS C or better during the AM and PM peak hours.

The Cumulative analysis includes planned roadway improvements, growth consistent with the 2004 General Plan, and with approved and reasonably foreseeable projects within the study area. This is found to be an impact in the cumulative scenario without the project, which includes other foreseeable but unapproved projects. Therefore, the project is responsible for its proportional share of the proposed mitigation under



cumulative conditions. Since the impact is identified under the cumulative scenario, the timing of the improvement is a function of the rate of population and employment growth. The County's traffic impact mitigation fee program provides a mechanism for collecting fair share contributions for improvements in the 2015 CIP.

The CIP includes a line item for unprogrammed traffic signal installation and operational and safety improvements at intersections, including improvements like construction of new traffic signals, construction of turn pockets, and the upgrade of existing traffic signal systems. The County annually monitors intersections with potential need for improvement through the Intersection Needs Prioritization Process. The Intersection Needs Prioritization Process is then used to inform the annual update to the CIP, and potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

Therefore, appropriate mitigation, as determined by the CDA, would include payment of traffic impact mitigation fees to satisfy the project's fair share obligation towards this improvement or construction of the improvement with reimbursement or fee credit for costs that exceed the project's proportional share if the improvement is needed but not included in future updates to the CIP or constructed by others. The project's proportional share of traffic entering the intersection is about 1.0 percent.

OR

- Restrict access on the eastbound and westbound approaches to left-in, right-in/right-out only. This is the County's preferred mitigation.

With either of these improvements, this impact would be **less than significant**.

From Attorney Marsha Burch, 2017: The Project is inconsistent with the General Plan

As an initial matter, the Project is inconsistent with General Plan policy TC-Xa.

Further, there is no evidence that the mitigation proposed in the Initial Study (above) and would mitigate the impacts to intersections with an existing LOS of F. There is a bare conclusion in the traffic study, but no discussion nor any suggestion that the impacts would truly be lessened.

The most recent staff report appears to be from September of last year [2016]. In that document, staff briefly discusses concerns about consistency with Measure E, and dismisses the concern by simply concluding that through mitigation, the Project will be consistent with Measure E. The trouble with this conclusion is that the "alternative mitigation measure" discussed in the Fehr & Peers Traffic Impact Study ("Traffic Study") has no substantial evidence to support it. The Traffic Study simply states that a signal at the two intersections that will be worsened by the Project would reduce the impact to less than significant, and then offers "alternatives" to the signals, with no analysis or discussion.

Mitigation 1 proposed in the Traffic Study for the intersection of Pleasant Valley Road/Racquet Way indicates that the LOS would be B with the installation of a signal,

and then proposes the alternative of providing a public road connection to Diamond Road, by way of Black Rice Road (which is a *private* road) would reduce impacts. It does not say to what LOS. This analysis is inadequate.

The same is true for Mitigation 2 for the intersection of Missouri Flat Road/China Garden Road.

The Project is also inconsistent with TC-Xd in that there is no demonstration that there is adequate emergency access.

This analysis is insufficient and there is no substantial evidence to support the conclusion that the impacts will be mitigated, nor enough to conclude that the Project is consistent with the General Plan.

As noted above, the mitigation measures for traffic impacts are “alternatives” to mitigation measures that were actually analyzed in the Traffic Study. There is no substantial evidence to support the conclusion that TR-1 and TR-2 will mitigate the impacts in the same way that the signals analyzed in the Traffic Study would. There is simply an unsupported conclusion in the Traffic Study, and repeated in the MND, stating that the mitigation measures will reduce the impacts to a level of insignificance. More is required to make such a conclusion.

Also, at the 1/9/25 meeting, the DOT representative stated that the roadway for this project is in table TC-2, that allows road segments to go to level of service F. **That is not true.** The segment on Pleasant Valley Road that can go to LOS F is between El Dorado Road and State Route 49, which does not include Pleasant Valley at Racquet Way.

Also, and most importantly General Plan policy 5.1.2.3, which was in the document submitted to the Planning Commission on 1-9-25 states that the project must be denied if the applicant cannot provide adequate infrastructure to serve the project which cannot be satisfactorily mitigated shall be grounds for denial of any project:

This is from the Fire Plan that is required and attached to the project and yet to be determined and may not be implemented due to Plannings disregard for these required policies... these policies are discretionary and if they cannot be met will also be a violation of the general plan. The project egress is onto a private road in which it was not made clear that the applicant had access to that road. According to State Law, these policies cannot be determined after the fact of an approval:

“A review of the information provided in the General Plan shows the Project as being at greatest risk to the threat of a wildfire. The focus of the FSP will be to address efforts to reduce the wildfire threat within the Project and surrounding areas.”

“Policy 5.1.2.2. Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 5.1.

Policy 5.1.2.3. New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. **Lack of available public or private services or adequate infrastructure to serve the project which cannot be satisfactorily mitigated shall be grounds for denial of any project** or cause for the

reduction of size, density, and/or intensity otherwise indicated on the General Plan land use map to the extent allowed by State law.

Policy 5.2.1.2. An adequate quantity and quality of water for all uses, including fire protection, shall be provided for with discretionary development.

Policy 5.7.1.1 Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, conveyance facilities, and access for fire protection either are or will be provided concurrent with development.

Policy 5.7.2.1. Prior to approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to provide protection services. The ability to provide fire protection to existing development shall not be reduced below acceptable levels as a consequence of new development.

Policy 5.7.4.2. Prior to approval of new development, the Emergency Medical Services Agency shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Policy 6.2.3.2. As a requirement of new development, the applicant must determine that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.11.2.1. Development shall be served by street system with at least two evacuation routes capable of carrying peak load traffic and have sufficient capacity to meet project need, or they must provide the necessary capacity to ensure the development has adequate fire protection and safe ingress and egress routes.

Even if the lead agency determines a project to be exempt to CEQA, the substantive requirements in the government code regarding fire protection must be satisfied."

This project does not meet the road capacity requirements, and the County cannot simply keep ignoring this requirement; therefore, it does not meet the fire plan requirements and must be denied.

Then there is the wetlands argument. The "revised" report relies on a 2012 report and it appears from the 2017 project studies, there were designated wetlands on this property. Also, the oak woodland requirements appeared to also be sidestepped.

Definition of wetlands as used for SB35:

"Wetlands. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes (plants specifically adapted to live in wetlands); (2) the substrate is predominantly undrained hydric (wetland) soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year."

The report from the oak woodlands study:

REVIEW OF NATURAL INVESTIGATIONS REPLACEMENT PLAN
(DATED APRIL 18, 2017)

An Oak Tree Survey, Preservation and Replacement Plan prepared by Natural Investigations Co. dated April 18, 2017 concluded that the project site is "...dominated by annual grassland habitats. Remnants of mixed oak-conifer woodlands and a small riparian corridor and associated wetlands are interspersed within the grasslands." It also concluded that "The percentage of oak species in the canopy is greater than the 10% threshold to define it as oak woodland; thus the woodland is an oak woodland as defined by County regulations."

The author stated that "the Property is subject to Canopy Retention and Replacement because the Property is greater than 1 acre and it contains more than 1 percent oak canopy cover." The calculated area of oak canopy to be removed was 0.110 acres, approximately 10% of the total oak canopy. The 90% retention standard was met.

The revision to the El Dorado County Oak Resource Management Plan (ORMP) and Oak Resource Conservation Ordinance (ORCO; adopted October 24, 2017) does not change the original impact assessment. Since the canopy impacts are to Valley Oak trees the mitigation requirement of 22 new oak trees is still mandated by the ordinance.


Maps of Wetlands from 2017, before the developer applied for SB35: The green "wetland" is on the Phase 2 property just on the west side of the proposed project.



DIAMOND SPRINGS, EL DORADO COUNTY, CALIFORNIA

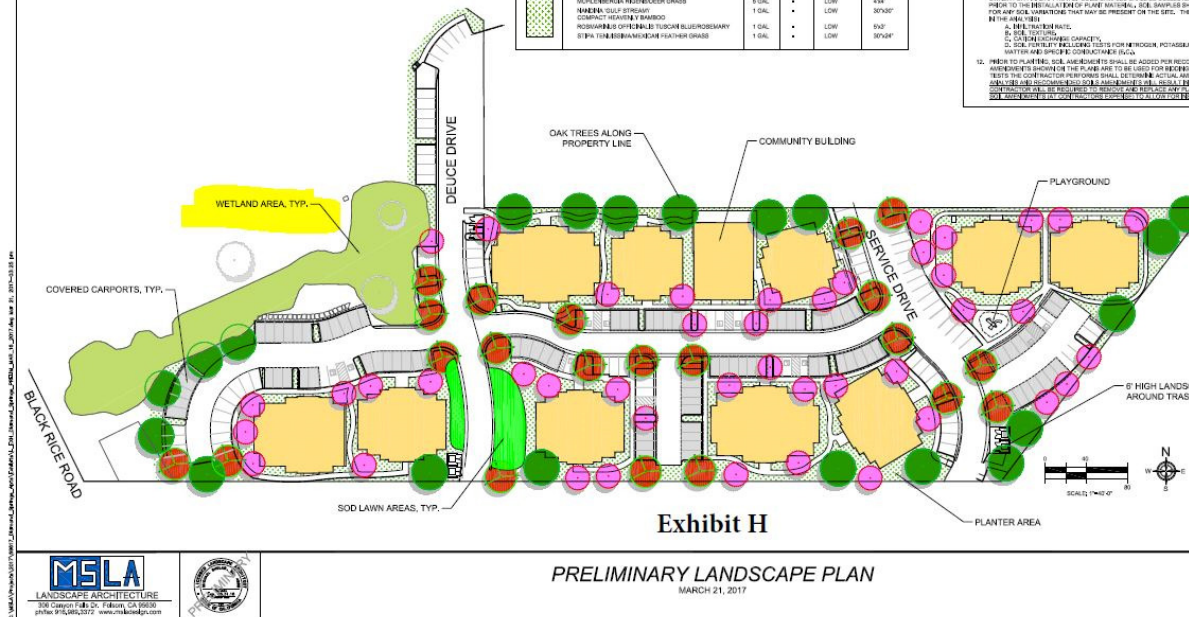
WATER BUDGET CALCULATIONS

REGIONAL COUNCIL WATER BUDGET FOR 2015-16 MAINLINE (L) = 250,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR	REGIONAL COUNCIL WATER BUDGET FOR 2015-16 MAINLINE (L) = 250,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR
TOTAL REGIONAL COUNCIL WATER BUDGET FOR 2015-16 MAINLINE (L) = 250,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR	TOTAL REGIONAL COUNCIL WATER BUDGET FOR 2015-16 MAINLINE (L) = 250,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR PUMPED (P) = 100,000 L PER YEAR

<u>PLANT LEGEND</u>					
SYN	BOTANICAL (COMMON NAME)	DBH	QTY	WATER USE	HT/WT
	SPERMATOPHYTES				
	QUERCUS GRANATA (SOUTHERN RED OAK)	15.0 AL	41	LOW	18'HT
	PERSEA GREGGII (COASTAL REDWOOD)				
	QUERCUS WILSONII (PINEWOOD OAK)	24" DBH	30	LOW	35'HT
	ACER RUBRUM (RED MAPLE)	15.0 AL	30	LOW	30'HT
	ANGIOSPERM GYMNOSES				
	ABIES CONOPHYLLA (SITKA SPRUCE)	9.0 AL	-	LOW	-
	CEDRUS DEGLIBATA (REDWOOD)	9.0 AL	-	LOW	44'
	LIBODENDRUM (REDWOOD)	9.0 AL	-	LOW	44'
	SPERMATOPHYTES				
	QUERCUS GRANATA (SOUTHERN RED OAK)	9.0 AL	-	LOW	34'
	QUERCUS WILSONII (PINEWOOD OAK)	9.0 AL	-	LOW	44'
	ACER RUBRUM (RED MAPLE)	9.0 AL	-	LOW	30'HT
	Gymnosperms				
	QUERCUS GRANATA (SOUTHERN RED OAK)	9.0 AL	-	LOW	34'
	QUERCUS WILSONII (PINEWOOD OAK)	9.0 AL	-	LOW	44'
	ACER RUBRUM (RED MAPLE)	9.0 AL	-	LOW	30'HT

PLANTING NC

7. PLANTED SHALL CONFORM TO EUROPEAN COUNTRY REQUIREMENTS.
8. PROVIDE MINIMUM LEVEL OF 15% FOR PROPOSED LANDSCAPE ARRY PLAN
9. THE PLANT SHALL BE SHOWN ON THE DRAWINGS AND BE IDENTIFICATION PLANT
10. THE PLANT SHALL BE IDENTIFIED BY THE NAME OF THE PLANT, ITS COMMON NAME, ITS COUNTRY OF ORIGIN, ITS GROWING HABITS, ITS USES, ITS LANDSCAPE ARCHITECT, AND ITS PLANTING INSTRUCTIONS.
11. ALL EXISTING TREES SHALL BE PROTECTED FROM DAMAGE OR REMOVAL DURING THE CONSTRUCTION OF THE PROJECT OR AN ADJACENT TREE.
12. BRUSHWOOD AND BRUSHWOOD SHALL BE USED FOR THE CONSTRUCTION OF PLANT MATERIALS AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
13. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
14. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
15. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
16. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
17. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
18. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
19. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE
20. THE CONTRACTOR SHALL ENSURE THAT ALL LOCATED PLANT MATERIALS ARE AVAILABLE FOR PROPOSED LANDSCAPE ARCHITECT, PLANTING AND LANDSCAPE ARCHITECT SHALL PROVIDE INSTRUCTIONS TO THE PLANTING CONTRACTOR TO BE USED WHICH INCLUDE A CHECKLIST TO BE USED TO THE



I am re-sending notes sent during the 1-9-25 hearing:

Below are some of the violations to the General Plan, that are not being considered by the Planning Department, and which also makes this project not qualify for SB35. This alone violates State law.

General Plan Requirements:

General Plan Policy TC-Xa:

1. Traffic from residential development projects of five or more units or parcels of land shall not result in, or worsen, Level of Service (LOS) F (gridlock, stop-and-go) traffic congestion during weekday, peak-hour periods on any highway, road, interchange, or intersection in the unincorporated areas of the county.

County's Rationale: "The project will create five (5) or more residential units. Due to the SB-35 status of the project, a Transportation Impact Study could not be required of the project."

THIS RATIONALE DOES NOT ADDRESS THE GENERAL PLAN REQUIREMENT. THE TRAFFIC STUDY FOR PHASE 1 OF THIS PROJECT SHOWED THAT THE CONGESTION IS ALREADY AT LOS F. THEREFORE PHASE 1 AND THIS PROJECT HAVE, AND WILL, WORSEN AN ALREADY NOT ALLOWED STANDARD. SB-35 DOES NOT ALLOW FOR A JURIDICION TO IGNORE GENERAL PLAN REQUIREMENTS.

General Plan TC-Xa Requirement:

2. The County shall not add any additional segments of U.S. Highway 50, or any other highways and roads, to the County's list of roads from the original Table TC-2 of the 2004 General Plan that are allowed to operate at LOS F without first getting the voters' approval.

County's Rationale: This is not applicable as the Project is not requesting any modifications to Table TC-2. **WRONG RATIONALE. A WORSENEDED SEGMENT IS BEING ADDED TO TABLE TC-2 WITHOUT GOING TO THE VOTERS FOR APPROVAL. THAT THE APPLICANT IS NOT REQUESTING TO TAKE THAT TO THE VOTERS IS A VIOLATION OF THE GENERAL PLAN.**

General Plan TC-Xa Requirement:

7. Before giving approval of any kind to a residential development project of five (5) or more units or parcels of land, the County shall make a finding that the project complies with the policies above. If this finding cannot be made, then the County shall not approve the project in order to protect the public's health and safety as provided by state law to assure that safe and adequate roads and highways are in place as such development occurs.

County's Rationale: The project would create more than five residential units and the finding is made that the project complies with the policies of TC-Xa.

NOT TRUE - SEE 1. AND 2. (THAT IS ABOVE 7), WHICH CANNOT BE MEET, THEREFORE THIS PROJECT IS REQUIRED TO BE DENIED.

Required Capacity is the essence of our General Plan titled, "A PLAN FOR MANAGED GROWTH AND OPEN ROADS; A PLAN FOR QUALITY NEIGHBORHOODS AND TRAFFIC RELIEF", please stop ignoring this requirement on nearly every project coming before the County.

2.9 The General Plan Policy TC-Xc does not apply to the project.

Developer paid traffic impact fees (TIF) combined with any other available funds shall fully pay for building all necessary road capacity improvements to fully offset and mitigate all direct and cumulative traffic impacts from new development during peak hours upon any highways, arterial roads, and their intersections during weekday, peak-hour periods in unincorporated areas of the county (Resolution 201-2018, September 25, 2018).

County's Rationale: This policy is not applicable as this policy directs how the County will pay for building the necessary road capacity. **WRONG RATIONALE. THIS POLICY DIRECTS THE DEVELOPER OF THE REQUIREMENT TO PAY FOR ALL NECESSARY ROAD CAPACITY IMPROVEMENTS REQUIRED DUE TO THE APPLICANTS PROJECT.**

2.10 The project is consistent with General Plan Policy TC-Xd.

LOS for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table. LOS will be as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council) and calculated using the methodologies contained in that manual. Analysis periods shall be based on the professional judgement of DOT, which shall consider periods including, but not limited to, Weekday Average Daily Traffic (ADT), AM Peak Hour, and PM Peak hour traffic volumes."

County's Rationale: This is an SB-35 project and cannot be required to provide a Transportation Impact Study (TIS) to evaluate specific consistency with this policy.

NOT TRUE. ACCORDING TO STATE CODES SB-35 PROJECTS ARE STILL REQUIRED TO MEET COUNTY ORDINANCES WHICH IS MENTIONED FURTHER IN THIS DOCUMENT. (Section 65852.24:

(A)(2)(A) THE HOUSING DEVELOPMENT SHALL BE SUBJECT TO LOCAL ZONING, PARKING, DESIGN, AND OTHER ORDINANCES, LOCAL CODE REQUIREMENTS, AND PROCEDURES APPLICABLE TO THE PROCESSING AND PERMITTING OF A HOUSING DEVELOPMENT IN A ZONE THAT ALLOWS FOR THE HOUSING WITH THE DENSITY DESCRIBED IN PARAGRAPH (1).) THIS APPLIES TO ALL THE OTHER POLICIES THAT THE FINDINGS HAVE IGNORED BY THIS STATEMENT.

2.11 The project is consistent with General Plan Policy TC-Xe.

For the purposes of this Transportation and Circulation Element, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

- A. A 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or
- B. The addition of 100 or more daily trips, or
- C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

Rationale: This is an SB-35 project and cannot be required to provide a TIS to evaluate specific consistency with this policy. NOT TRUE SEE RESPONSE ON 2.10 ABOVE.

2.12 The project is consistent with General Plan Policy TC-Xf.

At the time of approval of a tentative map for a single-family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain LOS standards detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure the commencement of construction of the necessary road improvements are included in the County's 10-year CIP.

For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain LOS standards detailed in this Transportation and Circulation Element; or (2) ensure the construction of the necessary road improvements are included in the County's 20-year CIP.

Rationale: This is an SB-35 project and cannot be required to provide a TIS to evaluate specific consistency with this policy. NOT TRUE SEE RESPONSE ON 2.10 ABOVE.

2.13 General Plan Policy TC-Xg does not apply to the project.

Each development project shall dedicate right-of-way, design and construct or fund any improvements necessary to mitigate the effects of traffic from the project. The County shall require an analysis of impacts of traffic from the development project, including impacts from truck traffic, and require dedication of needed right-of-way and construction of road facilities as

a condition of the development. This policy shall remain in effect indefinitely unless amended by voters.

Rationale: This is an SB-35 project and cannot be required to provide a TIS to evaluate specific consistency with this policy. NOT TRUE SEE RESPONSE ON 2.10 ABOVE.

2.14 This project is consistent with General Plan Policy TC-Xh.

All subdivisions shall be conditioned to pay the TIF fees in effect at the time a building permit is issued for any parcel created by the subdivision.

Rationale: The project is eligible for, but has not obtained, a TIF Fee Offset. If an offset is not obtained, this project will pay TIF Fees at the time a building permit is issued. EXPLAIN OFFSET: WHO WILL BE COMPENSATING IF THE COUNTY DOES NOT COLLECT FEES FOR THIS PROJECT WHICH ARE ALSO REQUIRED ON SB-35 PROJECTS?

3.2 The project is consistent with Section 130.24.030 (Residential Zone Development Standards).

Rationale: The project conforms to the site development standards for building height and minimum building setbacks. The maximum building height in the RM base zone is 50 feet. The project proposes a total of four (4) one- to three-story buildings with a maximum building height of 35 feet and 11 inches. Standard setbacks for building structures within the RM zone are 20 feet for the primary front setback, 10 feet for the secondary front setback, five feet for the side setback, and 10 feet for the rear setback. According to the project site plan (Exhibit R), all proposed structures meet these requirements. The proposed uses and structures are consistent with all applicable development standards. THE REQUIRED SETBACKS ARE 30' PER STATE CODE. I AM ASSUMING THAT THESE SETBACKS ARE BEING MET.

4.8 Does the project meet density requirements, "objective zoning standards," and "objective design review standards"?

Rationale: The MFR land use designation (Exhibit D) has a minimum density requirement of five (5) units per acre and a maximum density requirement of 24 units per acre. The project meets these standards, proposing 5.4 units per acre. As proposed and conditioned, all residential structures meet applicable objective development and design standards as more fully described in the above General Plan, Zoning, and SB-35 Findings. THIS DID NOT ANSWER THE QUESTION IF THE PROJECT COMPLIES TO "OBJECTIVE ZONING STANDARDS". IT DOES NOT.

b. Prime farmland or farmland of statewide importance.

Rationale: The project is not located on prime farmland or farmland of statewide importance as mapped by the California Department of Conservation (California Department of Conservation, Important Farmland Finder, <https://maps.conservation.ca.gov/DLRP/CIFF/>, last accessed July 21, 2020).

THIS IS FARMLAND OF LOCAL IMPORTANCE WHICH DISQUALIFIES THIS PROJECT FOR USING SB-35.

Federal Code:

These regulations do not supersede local regulations which equal or exceed minimum regulations adopted by the state.

State Code:

SB-35 - Chapter 4.2- 65913.4 (2) The development and the site on which it is located satisfy all of the following:

(B) At least 75 percent of the perimeter of the site adjoins parcels that are developed with urban uses. For the purposes of this section, parcels that are only separated by a street or highway shall be considered to be adjoined.

THE STAFF REPORT DID NOT MAKE A CORRECT DETERMINATION OF THIS REQUIREMENT. THE COMMUNITY REGION LINE IS THE URBAN BOUNDARY. THE BOUNDARY RUNS ALONG THE SIDE OF THIS PROPERTY; THEREFORE, THE PARCEL NORTH AND EAST ARE NOT AN URBAN USE. THIS MUST BE RECALCULATED TO DETERMINE THIS REQUIREMENT, OTHERWISE IF LESS THAN 75 PERCENT THE PROJECT DOES NOT QUALIFY FOR SB-35.

Lastly, one has to code track the applicable codes that connect to SB35. I tracked a few of those threads which lead to these requirements:

(C)(III) The site meets the requirements of Section 65852.24.

Section 65852.24:

(a)(2)(A) The housing development shall be subject to local zoning, parking, design, and other ordinances, local code requirements, and procedures applicable to the processing and permitting of a housing development in a zone that allows for the housing with the density described in paragraph (1).

-(paragraph (1) The density for the housing development shall meet or exceed the applicable density deemed appropriate to accommodate housing for lower income households in that jurisdiction as specified in subparagraph (B) of paragraph (3) of subdivision (c) of Section 65583.2.)-

-(From Section 65583.2:

Subdivision (c) Based on the information provided in subdivision (b), a city or county shall determine whether each site in the inventory can accommodate the development of some portion of its share of the regional housing need by income level during the planning period, as determined pursuant to Section 65584. The inventory shall specify for each site the number of units that can realistically be accommodated on that site and whether the site is adequate to accommodate lower income housing, moderate-income housing, or above moderate-income housing. A nonvacant site identified pursuant to paragraph (3) or (4) of subdivision (a) in a prior housing element and a vacant site that has been included in two or more consecutive planning periods that was not approved to develop a portion of the locality's housing need shall not be deemed adequate to accommodate a portion of the housing need for lower income households that must be accommodated in the current housing element planning period unless the site is zoned at residential densities consistent with paragraph (3) of this subdivision and the site is subject to a program in the housing element requiring rezoning within three years of the beginning of the planning period to allow residential use by right for housing developments in which at least 20 percent of the units are affordable to lower income households. Notwithstanding the foregoing, for a local government that fails to adopt a housing element that

the department has found to be in substantial compliance with state law within 120 days of the statutory deadline in Section 65588 for adoption of the housing element, rezoning pursuant to this subdivision shall be completed no later than one year from the statutory deadline in Section 65588 for adoption of the housing element. An unincorporated area in a nonmetropolitan county pursuant to clause (ii) of subparagraph (B) of paragraph (3) shall not be subject to the requirements of this subdivision to allow residential use by right. The analysis shall determine whether the inventory can provide for a variety of types of housing, including multifamily rental housing, factory-built housing, mobilehomes, housing for agricultural employees, supportive housing, single-room occupancy units, emergency shelters, and transitional housing, and whether the inventory affirmatively furthers fair housing. The city or county shall determine the number of housing units that can be accommodated on each site as follows:

Paragraph (3) For the number of units calculated to accommodate its share of the regional housing need for lower income households pursuant to paragraph (2), a city or county shall do either of the following:

Sub-paragraph (B) The following densities shall be deemed appropriate to accommodate housing for lower income households:

(i) For an incorporated city within a nonmetropolitan county and for a nonmetropolitan county that has a micropolitan area: sites allowing at least 15 units per acre.

(ii) For an unincorporated area in a nonmetropolitan county not included in clause (i): sites allowing at least 10 units per acre.

(iii) For a suburban jurisdiction: sites allowing at least 20 units per acre.

(iv) For a jurisdiction in a metropolitan county: sites allowing at least 30 units per acre.)-

(3) The housing development shall comply with any public notice, comment, hearing, or other procedures imposed by the local agency on a housing development in the applicable zoning designation identified in paragraph (2). (referring to paragraph (a)(2)(A) above)

(b)(5) The housing development complies with all other objective local requirements for a parcel, other than those that prohibit residential use, or allow residential use at a lower density than provided in paragraph (1), including, but not limited to, impact fee requirements and inclusionary housing requirements.

(g) Notwithstanding Section 65913.4, a project subject to this section shall not be eligible for streamlining pursuant to Section 65913.4 if it meets either of the following conditions:

(2) The developer of the project or any person acting in concert with the developer has previously proposed a project pursuant to Section 65913.4 of 10 units or fewer on the same or an adjacent site. PHASE 1 IS ADJACENT TO THE PROJECT AND HAS 10 UNITS.

Other issues:

Regarding the June 2022 parcel split: It is not clear if this parcel split was publicly posted or heard by the appropriate jurisdictional body. The findings state that a parcel map waiver was applied for and approved. If this is true the county sidestepped analyzing, and publicly noticing the public. It appears that the project is leaving less than 5 acres on a parcel that is general plan designated Medium-Density Residential (MDR) and zoning designated "Residential Estate Five-Acre-Planned Development (RE-5-PD), meaning 5 acre minimum. "The Project is approximately 5.71 ± acres in size. The Project is currently zoned by the County of El Dorado for both Residential Multi-Unit (RM) and Residential Estate 5 Acres – Planned Development (RE-5)

uses. Approximately 3.9 acres of the Project site will remain unimproved and in its natural condition. This violates zoning law. This parcel split and project has been purposely hidden from the public.

The Staff Report states the No formal public outreach was conducted by the County beyond the CAC's publicly noticed May 16, 2024 meeting. According to State Code Section 65583.2 above, the project is still required to comply with notifying the public. With the violations of the General Plan and not meeting objective zoning standards this never was a SB-35 project. This project must be denied and processed as a project subject to CEQA.

To remind you why you should deny this project:

Regarding requested actions 1-3:

- 1) Certify the project to be Statutorily Exempt pursuant to Section 15268, Ministerial Projects, of the CEQA Guidelines and Government Code section 65913.4(d)(2); **Not met – this was a discretionary hearing, or it would not have come to the Planning Commission.**
- 2) Find that the project is consistent with the provisions of SB-35; and **Not met – the project does not comply with objective zoning standards or our General Plan policies.**
- 3) Approve Design Review Permit DR24-0008, based on the Findings and subject to the Conditions of Approval as presented. **Not met – violated the allowable amount of stucco to be place on the buildings. "Use of stucco shall not exceed fifty percent (50%) of façades that face the street".**

Planning Staff must stop sidestepping our General Plan and Zoning Laws. It is up to the Planning Commission to hold them responsible and to protect the citizens of this great County by researching these laws and policies.

Based on the information presented and other information not yet documented, this project must be denied and/or resubmitted following the laws of the state and the county. You have the right to bring this back to the Planning Commission for a revote prior to the approval of the minutes.

Thank you for your consideration,

Sue Taylor for Sue Taylor, Save Our County, Save Our County – Joint Coalition

s/Sue Taylor

Re: 1/9/25, Item #2, Legistar #25006, Diamond Springs Apartments Phase 2 (Design Review DR24-0008)

From Sue Taylor <suetaylor530@gmail.com>

Date Thu 1/23/2025 2:43 AM

To Bob Williams <Bob.Williams@edcgov.us>; Planning Department <planning@edcgov.us>; Patrick Frega <Patrick.Frega@edcgov.us>; David Spaur <David.Spaur@edcgov.us>; Andy Nevis <Andy.Nevis@edcgov.us>; Jeff Hansen <Jeff.Hansen@edcgov.us>

Cc BOS-District IV <bosfour@edcgov.us>; BOS-District I <bosone@edcgov.us>; BOS-District V <bosfive@edcgov.us>; BOS-District II <bostwo@edcgov.us>; BOS-District III <bosthree@edcgov.us>; BOS-Clerk of the Board <edc.cob@edcgov.us>

 2 attachments (3 MB)

E - Staff Report Exhibit K-Traffic Impact Study PC 6-22-17.pdf; 2019.03.28 - Diamond Springs Village Apartments (SITE).pdf;

This Message Is From an Untrusted Sender

You have not previously corresponded with this sender.

Report Suspicious

Sorry I forgot the other attachments mentioned in the comment letter.

On Thu, Jan 23, 2025 at 2:09 AM Sue Taylor <suetaylor530@gmail.com> wrote:

Sorry for my late submission, but please review my comment letter prior to your Planning Commission hearing.

Thank you,
Sue Taylor
530-391-2190

DIAMOND SPRINGS VILLAGE APARTMENTS

VICINITY MAP

A PORTION OF THE SOUTH 1/ 2 OF SECTION 19 AND THE NORTH 1/ 2 OF SECTION 30, T.10 N., R.11 E., M.D.M.
DIAMOND SPRINGS, EL DORADO COUNTY, CALIFORNIA
OCTOBER, 2017 SCALE: 1" = 100'



SHEET	DIAMOND SPRINGS VILLAGE APARTMENTS			DESIGNED: MDW		
	VICINITY MAP			DRAWN: AM		
	EL DORADO COUNTY			PROJ: NO201214		
				DWG: SEE DAY STAMP		
A0.3	CALIFORNIA			DATE: SEE DAY STAMP		



Diamond Springs Village Apartments

March 2017

Prepared for:
CoreCare Foundation
8863 Greenback Lane, Suite 324
Orangevale, CA 95662

Submitted by:

FEHR  PEERS

1001 K Street, 3rd Floor
Sacramento, CA 95814



Table of Contents

INTRODUCTION.....	1
Report Overview.....	1
Project Description.....	1
REGULATORY SETTING.....	2
State.....	2
California Department of Transportation	2
Local.....	3
Sacramento area Council of Governments	3
El Dorado County Transportation Commission (EDCTC).....	3
County of El Dorado.....	4
El Dorado County Transit Authority.....	5
METHOD OF ANALYSIS	6
Analysis Procedures.....	6
Intersections	6
Roadway Segments	8
Thresholds of Significance	8
EXISTING SETTING	11
Study Area	11
Roadway Network	12
Existing Conditions Peak Hour Traffic Volumes	13
Existing Conditions Peak Hour Vehicle Level of Service	16
Intersections	16
Roadway Segments	17
Pedestrian Circulation	18
Bicycle Circulation.....	18
Transit.....	18
EXISTING PLUS PROJECT CONDITIONS.....	20
Trip Generation.....	20



Trip Distribution and Assignment	20
Peak Hour Vehicle Level of Service.....	24
Intersections	24
Vehicle queuing	26
Roadway Segments	26
CUMULATIVE CONDITIONS	28
Travel Demand Forecasts	28
Base Year Model validation	28
Future Year Modeling Assumptions.....	30
Peak Hour Vehicle Level of Service.....	31
Intersections	31
Vehicle queuing	33
Roadway Segments	34
IMPACT STATEMENTS AND MITIGATION MEASURES	39
Existing Plus Project.....	39
Intersections	39
Cumulative Plus Project.....	42
Intersections	42
Bicycle and Pedestrian Circulation.....	44
Transit.....	44
Other Considerations	46
Peak Hour Traffic Signal Warrant Evaluation.....	46
Collision History Review	47
Parking.....	47
Site Access.....	47

Appendices

- Appendix A: Intersection and Roadway Counts and Existing Conditions Technical Calculations
- Appendix B: Existing Plus Project Technical Calculations
- Appendix C: Cumulative No Project Technical Calculations
- Appendix D: Cumulative Plus project technical calculations



Appendix E: Mitigation Technical Calculations

Appendix F: Signal Warrant Analysis

List of Figures

Figure 1A	Peak Hour Traffic Volumes and Lane Configurations – Existing Conditions	14
Figure 1B	Peak Hour Traffic Volumes and Lane Configurations – Existing Conditions	15
Figure 2	Project Trip Distribution – Existing Conditions.....	21
Figure 3A	Peak Hour Traffic Volumes and Lane Configurations – Existing Plus Project Conditions	22
Figure 3B	Peak Hour Traffic Volumes and Lane Configurations – Existing Plus Project Conditions	23
Figure 4	Project Trip Distribution – Cumulative Conditions.....	35
Figure 5A	Peak Hour Traffic Volumes and Lane Configurations - Cumulative Conditions	36
Figure 5B	Peak Hour Traffic Volumes and Lane Configurations – Cumulative Conditions	37

List of Tables

Table 1	Intersection LOS Criteria.....	7
Table 2	Peak Hour Roadway Segment LOS Criteria	8
Table 3	Peak Hour Intersection Level of Service – Existing Conditions	16
Table 4	Peak Hour Roadway Segment Level of Service – Existing Conditions	17
Table 5	Project Trip Generation.....	20
Table 6	Peak Hour Intersection Level of Service – Existing Plus Project Conditions	25
Table 7	Average Maximum Queue Length – existing Plus Project Conditions.....	26
Table 8	Peak Hour Roadway Segment Level of Service – Existing Plus Project Conditions	27
Table 9	Travel Demand Forecasting Model Subarea Static Validation	30
Table 10	Peak Hour Intersection Level of Service – Cumulative Conditions	32
Table 11	Average Maximum Queue Length – Cumulative Plus Project Conditions.....	33
Table 12	Peak Hour Roadway Segment Level of Service – Cumulative Conditions	38
Table 13	Peak Hour Intersection Level of Service – Existing Plus Project Conditions with Mitigations	41
Table 14	Peak Hour Intersection Level of Service – Cumulative Plus Project Conditions with Mitigations..	45
Table 15	Peak Hour Signal Warrant Existing Plus Project and Cumulative Plus Project Conditions.....	47



INTRODUCTION

REPORT OVERVIEW

This study presents the results of a transportation impact analysis completed for the Diamond Springs Village Apartments project (project) in Diamond Springs, California, which is an unincorporated area of El Dorado County (County).

The purpose of this impact analysis is to identify potential environmental impacts to transportation facilities as required by the California Environmental Quality Act (CEQA). This study was performed in accordance with the El Dorado County Community Development Agency's *Traffic Impact Study Guidelines* (November 2014), and the scope of work developed in collaboration with County staff and Caltrans.

The remaining sections of this report document the proposed project, analysis methodologies, impacts and mitigations.

PROJECT DESCRIPTION

The proposed project would construct 80 affordable apartment units and one supervisory unit located south of Black Rice Lane, north of Pearl Place, east of Courtside Drive, and west of Deuce Drive/Service Drive. The project site is surrounded primarily by multi-family residential (Diamond Terrace Apartments) and rural single-family residential. Access to the proposed project would be provided via Racquet Way and Pearl Place, which intersect Pleasant Valley Road south of the project site. Racquet Way and Pearl Place will provide primary emergency vehicle access to the proposed project. The project is consistent with the adopted General Plan. The project site is shown on Figure 1.





REGULATORY SETTING

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below. This information provides a context for the impact discussion related to the project's consistency with applicable regulatory conditions.

STATE

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The California Department of Transportation (Caltrans) is responsible for operating and maintaining the State highway system. In the project vicinity, US 50 falls under Caltrans' jurisdiction. Caltrans provides administrative support for transportation programming decisions made by the California Transportation Commission (CTC) for state funding programs. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans.

In June 2014, Caltrans approved a *Transportation Concept Report and Corridor System Management Plan (TCR/CSMP) for United States Route 50*. Caltrans prepares a TCR/CSMP, which is a long-range (20-year) planning document, for each state highway. The purpose of each TCR/CSMP is to identify existing route conditions and future needs and to communicate the vision for the development of each route during a 20-year planning horizon. Caltrans has established LOS E as the 'concept LOS' consistent with the El Dorado County General Plan LOS policy. Since LOS E is identified as the concept LOS no further degradation of service from existing "E" is acceptable. The Concept LOS is a generalized LOS for large study segments used by Caltrans that reflect the minimum level of service or quality of operations acceptable for each route segment.

According to the *Guide for the Preparation of Traffic Impact Studies* (Caltrans, December 2002), the existing LOS should be maintained if a freeway facility is currently operating at an unacceptable LOS (e.g., LOS F). A project impact is said to occur if the project degrades LOS from an acceptable to unacceptable level. A project impact may also occur when the addition of project trips exacerbates existing LOS F conditions and leads to a perceptible increase in density on freeway mainline segments or ramp junctions, or a perceptible increase in service volumes in a weaving area. In addition, a project impact is said to occur when the addition of project trips causes a queue on the off-ramp approach to a ramp terminal intersection to extend beyond its storage area and onto the freeway mainline.





LOCAL

SACRAMENTO AREA COUNCIL OF GOVERNMENTS

The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento Region. Its members include the counties of Sacramento, El Dorado, Placer, Sutter, Yolo, and Yuba, as well as 22 cities. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region's long-range transportation plan, SACOG assists in planning for transit, bicycle networks, clean air, and airport land uses.

The *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for 2035* (SACOG 2012) is a federally mandated long-range fiscally constrained transportation plan for the six-county area. Most of this area is designated a federal non-attainment area for ozone, indicating that the transportation system is required to meet stringent air quality emissions budgets to reduce pollutant levels that contribute to ozone formation. To receive federal funding, transportation projects nominated by cities, counties, and agencies must be consistent with the MTP/SCS.

The *2013/16 Metropolitan Transportation Improvement Program (MTIP)* is a list of transportation projects and programs to be funded and implemented over the next 3 years. SACOG submits this document to Caltrans and amends the program on a quarterly cycle. Only projects listed in the MTP/SCS may be included in the MTIP.

EL DORADO COUNTY TRANSPORTATION COMMISSION (EDCTC)

The EDCTC is the Regional Transportation Planning Agency (RTPA) for El Dorado County, except for the portion of the County within the Tahoe Basin, which is under the jurisdiction of the Tahoe Regional Planning Agency (TRPA).

One of the fundamental responsibilities which results from RTPA designation is the preparation of the County's Regional Transportation Plan. The *El Dorado County Regional Transportation Plan 2010 – 2030 (RTP)* is designed to be a blueprint for the systematic development of a balanced, comprehensive, multi-modal transportation system. The EDCTC submits the RTP to SACOG for inclusion in the MTP/SCS process.

The *El Dorado County Bicycle Transportation Plan - 2010 Update* provides a blueprint for the development of a bicycle transportation system on the western slope of El Dorado County. The plan updates the currently adopted *El Dorado County Bicycle Master Plan*, which was adopted in January 2005.





In May 2013, The EDCTC completed the *El Dorado Hills Community Transit Needs Assessment and US 50 Corridor Operations Plan* (Plan), which explores how the recent growth and projected development impact the need for transit services, and identifies the most appropriate type and level of service needed given the demand. The Plan represents a recommendation from the Western El Dorado County 2008 Short-Range Transit Plan to study and consider improved transit service in the El Dorado Hills area.

In August 2008, The EDCTC adopted the *Coordinated Public Transit – Human Services Transportation Plan*, which is intended to improve mobility of individuals who are disabled, elderly, or of low-income status. The plan focuses on identifying needs specific to those population groups and identifying strategies to meet their needs.

COUNTY OF EL DORADO

The County of El Dorado provides for the mobility of people and goods within Diamond Springs, which is an unincorporated area of the County.

The Transportation and Circulation Element of the El Dorado County General Plan (amended January 2009) outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The following goals and their associated policies are relevant to the project.

- GOAL TC-1: To plan for and provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the safe, orderly, and efficient movement of people and goods.
- GOAL TC-X: To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads. (The LOS policy specific to this project is described in Section 4.2.)
- GOAL TC-2: To promote a safe and efficient transit system that provides service to all residents, including senior citizens, youths, the disabled, and those without access to automobiles that also helps to reduce congestion, and improves the environment.
- GOAL TC-3: To reduce travel demand on the County's road system and maximize the operating efficiency of transportation facilities, thereby reducing the quantity of motor vehicle emissions and the amount of investment required in new or expanded facilities.
- GOAL TC-4: To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes.
- GOAL TC-5: To provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode.

The El Dorado County Community Development Agency's *Transportation Impact Study Guidelines* set forth the protocols and procedures for conducting transportation analysis in the County (El Dorado County,





2014), including the identification of the study area. All of the study intersections for the proposed project are within the County's jurisdiction. This traffic analysis is consistent with the County-established methods at the commencement of the project.

The project is subject to Measure E, which was adopted June 6, 2016 and became official on July 29, 2016. Because the project is an affordable workforce multi-family housing project, it is not subject to certain provisions of Measure E. Specifically, the 10-year impact analysis is not required for the following reasons:

- TC-Xf requires a ten-year traffic impact review for tentative maps with five or more parcels. This project is not a subdivision application with five or more parcels.
- The second paragraph in TC-Xf states "For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element." This project is conditioned to construct all road improvements necessary to maintain or attain Level of Service standards.
- State law requires Housing Elements to "address and where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing" (Government Code Section 65583[c][3]). This project is an affordable workforce multifamily housing project.
- General Plan Implementation Measure HO-2013-13 states, "...identify additional opportunities to further streamline the procedures for affordable housing projects while maintaining adequate levels of public review." (Government Code Section 65583 and 65920 et seq.; General Plan Policies HO-1.3, HO-1.7, HO-1.16, HO-1.18)
- General Plan Implementation Measure HO-2013-14 states, "...assist developers in addressing barriers to infill development." (General Plan Policy HO-1.5)
- General Plan Implementation Measure LU-Q states, "Promote Infill Development: The program shall be linked to land-use, housing, air quality, transportation and circulation strategies that support development within existing communities, reduce vehicle miles traveled, increase energy efficiency, and encourage the development of affordable housing." (General Plan Objective 2.1.4, Policy 2.4.1.5)

EL DORADO COUNTY TRANSIT AUTHORITY

El Dorado County Transit Authority (EDCTA) operates El Dorado Transit, which provides public transit service within the project area. Diamond Springs is currently served by El Dorado Transit Dial-A-Ride services, Commuter Service, and the Diamond Springs Route.





METHOD OF ANALYSIS

ANALYSIS PROCEDURES

Intersections and roadways were selected for analysis based on coordination with the El Dorado County Community Development Agency, Long Range Planning staff and Caltrans, and based on the expected distribution of project trips and review of the El Dorado County Community Development Agency's *Transportation Impact Study Guidelines*.

Each study roadway facility was analyzed using the concept of Level of Service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents long delays and a facility that is operating at or near its functional capacity.



INTERSECTIONS

Traffic operations at the study intersections were analyzed using procedures and methodologies contained in the Transportation Research Board's *Highway Capacity Manual (HCM) 2010*. These methodologies were applied using the Synchro software package (Version 8), developed by Trafficware. Table 1 displays the delay range associated with each LOS category for signalized and unsignalized intersections based on the *HCM*.

The HCM methodology determines the LOS at signalized intersections by comparing the average control delay (i.e., delay resulting from initial deceleration, queue move-up time, time actually stopped, and final acceleration) per vehicle at the intersection to the established thresholds. The LOS for traffic signal controlled and all-way stop controlled intersections is based on the average control delay for the entire intersection. For side street stop controlled intersections, the LOS is evaluated separately for each individual movement with delay reported for the critical (i.e., worst case) turning movement.



TABLE 1 INTERSECTION LOS CRITERIA

Level of Service	Description	Average Control Delay (seconds per vehicle)	
		 Signalized Intersections ¹	 Unsignalized Intersections ²
A	Represents free flow. Individual users are virtually unaffected by others in the traffic stream.	≤ 10	≤ 10
B	Stable flow, but the presence of other users in the traffic stream begins to be noticeable.	> 10 to 20	> 10 to 15
C	Stable flow, but the operation of individual users becomes significantly affected by interactions with others in the traffic stream.	> 20 to 35	> 15 to 25
D	Represents high-density, but stable flow.	> 35 to 55	> 25 to 35
E	Represents operating conditions at or near the capacity level.	> 55 to 80	> 35 to 50
F	Represents forced or breakdown flow.	> 80	> 50

Sources:

¹ Highway Capacity Manual 2010, Chapter 18, Signalized Intersections

² Highway Capacity Manual 2010, Chapter 19, Two Way Stop Controlled Intersections

Highway Capacity Manual 2010, Chapter 20, All Way Stop Controlled Intersections

The following procedures and assumptions were applied for the analysis of existing and cumulative conditions:

- Roadway geometric data were gathered using field observations.
- Peak hour traffic volumes were entered according to the peak hour of each intersection.
- The peak hour factor (PHF) was calculated based on traffic counts and applied by intersection.
- The counted pedestrian and bicycle volumes were used.
- Heavy vehicle percentages were based on traffic counts and applied by movement with a minimum of 2 percent per movement per peak hour.
- Signal phasing and timings were based on existing signal timing sheets provided by El Dorado County.
- Speeds for the model network were based on the posted speed limit.
- A PHF of 0.92 or the existing PHF for each intersection (whichever is greater) was used for cumulative conditions.
- The existing heavy vehicle percentages were maintained for cumulative conditions.
- The existing pedestrian and bicycle volumes were maintained for cumulative conditions.
- The 2015 CIP projects were assumed to be in place for cumulative conditions.
- Traffic signal timings were optimized to serve future traffic volumes for cumulative conditions.



ROADWAY SEGMENTS

Roadway segment LOS was determined by comparing peak hour traffic volumes for the study roadway segments to the LOS capacity thresholds in Table 2. The LOS capacity thresholds, provided in the El Dorado County Community Development Agency's *Transportation Impact Study Guidelines*, November 2014, were calculated based on the methodology contained in the *HCM 2010*.

TABLE 2 PEAK HOUR ROADWAY SEGMENT LOS CRITERIA						
Code	Functional Class Codes	HCM 2010 Planning Level Volumes				
		A	B	C	D	E
2A	Two-Lane Arterial	-	-	850	1,540	1,650
4AU	Four-Lane Arterial, Undivided	-	-	1,760	3,070	3,130
4AD	Four-Lane Arterial, Divided	-	-	1,850	3,220	3,290
Notes: Arterial LOS based on <i>HCM 2010</i> , Exhibit 16-14, K-factor of 0.09, posted speed 45 mph Volumes are for both directions unless noted. Source: <i>Transportation Impact Study Guidelines</i> , El Dorado County Community Development Agency, November 2014						

THRESHOLDS OF SIGNIFICANCE

In accordance with the California Environmental Quality Act (CEQA), the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. Informed by the CEQA Statute and Guidelines, specifically Appendix G of the CEQA Guidelines, criteria have been established for this analysis to determine whether or not the project would have a significant impact on transportation and circulation.

The intent of CEQA Guidelines Section 15064 is for the responsible agency to establish the thresholds in the context of their specific values towards environmental resources or impacts. Therefore, the standards of significance in this analysis are based on the framework presented in CEQA Guidelines Appendix G and the current practice of the appropriate regulatory agencies. For most areas related to transportation and circulation, policies from the *2004 El Dorado County General Plan* (amended January 2009) and the El Dorado County Department of Transportation's *2008 Traffic Impact Study Protocols and Procedures* were used. Implementation of the project would have a potentially significant impact on transportation and circulation if it causes any of the following outcomes:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness (MOEs) for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle



paths, and mass transit. The following specific MOEs, which have been generated by the regulatory agencies, are applicable to this project.

- General Plan Circulation Policy TC-Xd provides Level of Service standards for County-maintained roads and state highways as follows¹:
 - Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 as applicable shall not exceed the ratio specified in that table.
 - Missouri Flat Road – Mother Lode Drive to China Garden Road: Max. v/c = 1.20
 - Pleasant Valley Road – El Dorado Road to SR 49: Max. v/c = 1.28
 - If a project causes the peak hour level of service or volume/capacity ratio on a county road or state highway that would otherwise meet the County standards (without the project) to exceed the LOS threshold, then the impact shall be considered significant.
 - If any county road or state highway fails to meet the above listed county standards for peak hour level of service or volume/capacity ratios under existing conditions, and the project will “worsen” conditions on the road or highway, then the impact shall be considered significant. The term “significantly worsen” is defined for the purpose of the paragraph according to General Plan Policy TC-Xe as follows:
 - A. A two (2) percent increase in traffic during the AM peak hour, PM peak hour, or daily, OR
 - B. The addition of 100 or more daily trips, OR
 - C. The addition of 10 or more trips during the AM peak hour or the PM peak hour.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

¹ El Dorado County Department of Transportation's Traffic Impact Study Protocols and Procedures



- The County has published the following issues and General Plan goals as relevant to traffic impact study assessments. The project may trigger a potentially significant impact if it's in conflict with any of the following:
 - Access to Public Transit Services consistent with General Plan Circulation Element Goal TC-2: "To promote a safe and efficient transit system that provides service to all residents, including senior citizens, youths, the disabled, and those without access to automobiles that also helps to reduce congestion, and improves the environment."
 - Transportation System Management consistent with General Plan Circulation Element Goal TC-3: "To reduce travel demand on the County's road system and maximize the operating efficiency of transportation facilities, thereby reducing the quantity of motor vehicle emissions and the amount of investment required in new or expanded facilities."
 - Non-Motorized Transportation consistent with General Plan Circulation Element Goal TC-4: "To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes."
- Conflict with adopted policies, plans, or programs regarding the delivery of goods and services.





EXISTING SETTING

STUDY AREA

Based on coordination with the El Dorado County Community Development Agency (Long Range Planning) staff, the expected distribution of project trips, and review of the El Dorado County *Traffic Impact Study Guidelines*, the following study intersections and roadways were selected for analysis during the AM and PM peak hours. Figure 1 identifies the study area.

The following lists both existing intersections and future intersections (applicable only to the Cumulative Conditions analysis).

Intersections:

1. Pleasant Valley Road/Racquet Way
2. Pleasant Valley Road/Pearl Place
3. Pleasant Valley Road (SR 49)/Diamond Road (SR 49)
4. Pleasant Valley Road (SR 49)/China Garden Road
5. Pleasant Valley Road (SR 49)/Missouri Flat Road
6. Missouri Flat Road /China Garden Road
7. Missouri Flat Road /Golden Center Drive
8. Diamond Road/Lime Kiln Road/Black Rice Road
9. Missouri Flat Road/Diamond Springs Parkway (future intersection)
10. Throwita Way/Diamond Springs Parkway (future intersection, cumulative analysis only)
11. Diamond Road (SR 49)/Diamond Springs Parkway (future intersection, cumulative analysis only)
12. Missouri Flat Road/Forni Road
13. Missouri Flat Road/Mother Lode Drive
14. Missouri Flat Road/US 50 EB Ramps
15. Missouri Flat Road/US 50 WB Ramps
16. Missouri Flat Road/Plaza Drive

Roadway Segments:

1. Missouri Flat Road – US 50 to Golden Center Drive
2. Missouri Flat Road – Golden Center Drive to Pleasant Valley Road (SR 49)
3. Pleasant Valley Road (SR 49) – SR 49 (West) to Missouri Flat Road





4. Pleasant Valley Road (SR 49) – Missouri Flat Road to Diamond Road (SR 49)
5. Pleasant Valley Road (SR 49) – Diamond Road (SR 49) to Canyon Valley Road
6. Pleasant Valley Road (SR 49) – Canyon Valley Road to Big Cut Road
7. Diamond Road (SR 49) – Pleasant Valley Road to Lime Kiln Road/Diamond Springs Parkway
8. Diamond Road (SR 49) – Lime Kiln Road/Diamond Springs Parkway to Bradley Drive
9. China Garden Road – Missouri Flat Road to Pleasant Valley Road (SR 49)
10. Diamond Springs Parkway – Missouri Flat Road to Diamond Road (SR 49)

ROADWAY NETWORK

The characteristics of the roadway system near the project are described below. Where applicable, the roadway designation given in the *2004 El Dorado County General Plan* (amended January 2009) is provided.

Pleasant Valley Road (State Route 49) is a two-lane, east-west roadway that intersects Mother Lode Drive to the west and Sly Park Road to the east. Pleasant Valley Road is identified in the El Dorado County General Plan as a Major 2-Lane Road and shares a route with State Route (SR) 49 from Golden Chain Highway to Diamond Road. The posted speed limit on Pleasant Valley Road within the project area ranges from 25 to 45 mph.

Missouri Flat Road generally runs northwest-southeast between Green Valley Road (north of US Highway 50) and Pleasant Valley Road. Missouri Flat Road has two lanes for the majority of its route (and is identified as a Major 2-Lane Road in the El Dorado County General Plan), but widens to four lanes across US 50 to Golden Center Drive to the south (and is identified as a 4-Lane Divided Road in the El Dorado County General Plan). The posted speed limit of Missouri Flat is 45 mph in the project area.

Diamond Road (SR 49) is a two-lane, north-south roadway that is identified as a Major 2-Lane Road in the El Dorado County General Plan. Diamond Road shares a route with SR 49 for its entire length from Sacramento Street to Pleasant Valley Road. The posted speed limit on Diamond Road ranges from 40 to 50 mph near the project.

China Garden Road is identified as a 2-Lane Regional Road in the El Dorado County General Plan. China Garden Road connects Missouri Flat Road to Pleasant Valley Road east of Missouri Flat Road and north of Pleasant Valley Road. The posted speed limit on China Garden Road is 35 mph.

Diamond Springs Parkway is a planned four-lane divided roadway that will connect Missouri Flat Road north of China Garden Road to Diamond Road (SR 49) north of Lime Kiln Road. The roadway will include





bicycle and pedestrian access with sidewalks and Class II bike lanes. Three bus turnouts will also be included along the new roadway.

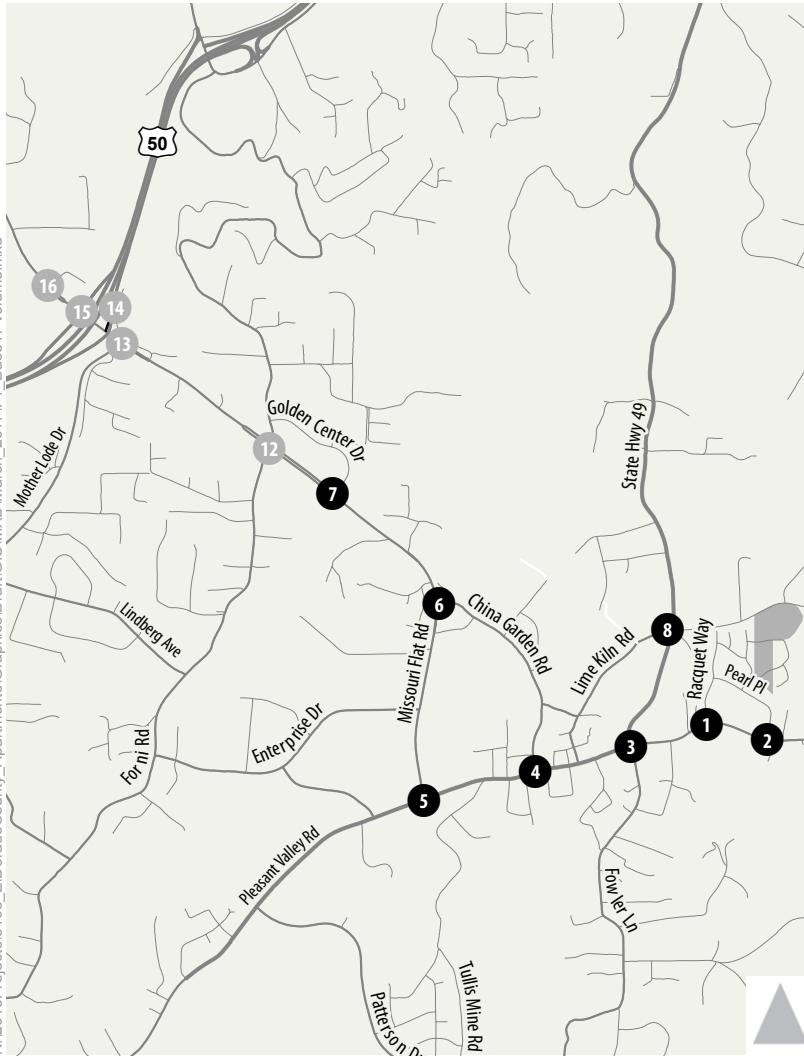
EXISTING CONDITIONS PEAK HOUR TRAFFIC VOLUMES

AM peak period (7 AM to 9 AM) and PM peak period (4 PM to 6 PM) intersection turning movement counts were collected to determine the existing traffic operations of the study facilities. Traffic counts were collected at the study intersections on the following dates:

1. Pleasant Valley Road/Racquet Way – July 30, 2014
2. Pleasant Valley Road/Pearl Place – July 14, 2015
3. Pleasant Valley Road (SR 49)/Diamond Road (SR 49) – May 5, 2015 and July 14, 2015
4. Pleasant Valley Road (SR 49)/China Garden Road – September 26, 2012
5. Pleasant Valley Road (SR 49)/Missouri Flat Road – May 5, 2015
6. Missouri Flat Road /China Garden Road – May 5, 2015
7. Missouri Flat Road /Golden Center Drive – May 5, 2015

Traffic counts at some of the study intersections were collected during the summer (July). In order to scale these traffic volumes to reflect non-summer conditions, traffic counts were collected at the Pleasant Valley Road (SR 49)/Diamond Road (SR 49) intersection in May and July in order to create a factor and adjust the volumes. The existing traffic volumes were balanced between intersections where appropriate to account for any differences associated with counts being collected on different days. The AM peak hour of the study intersections is generally between 7:15 AM and 8:15 AM. The PM peak hour of the study intersections is generally between 4:30 PM and 5:30 PM. Figure 1 shows the peak hour traffic volumes, lane configurations and traffic controls at each of the study intersections.





- 1** Study Intersection
- 12** Study Intersection shown in Figure 1B
- Project Site
- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

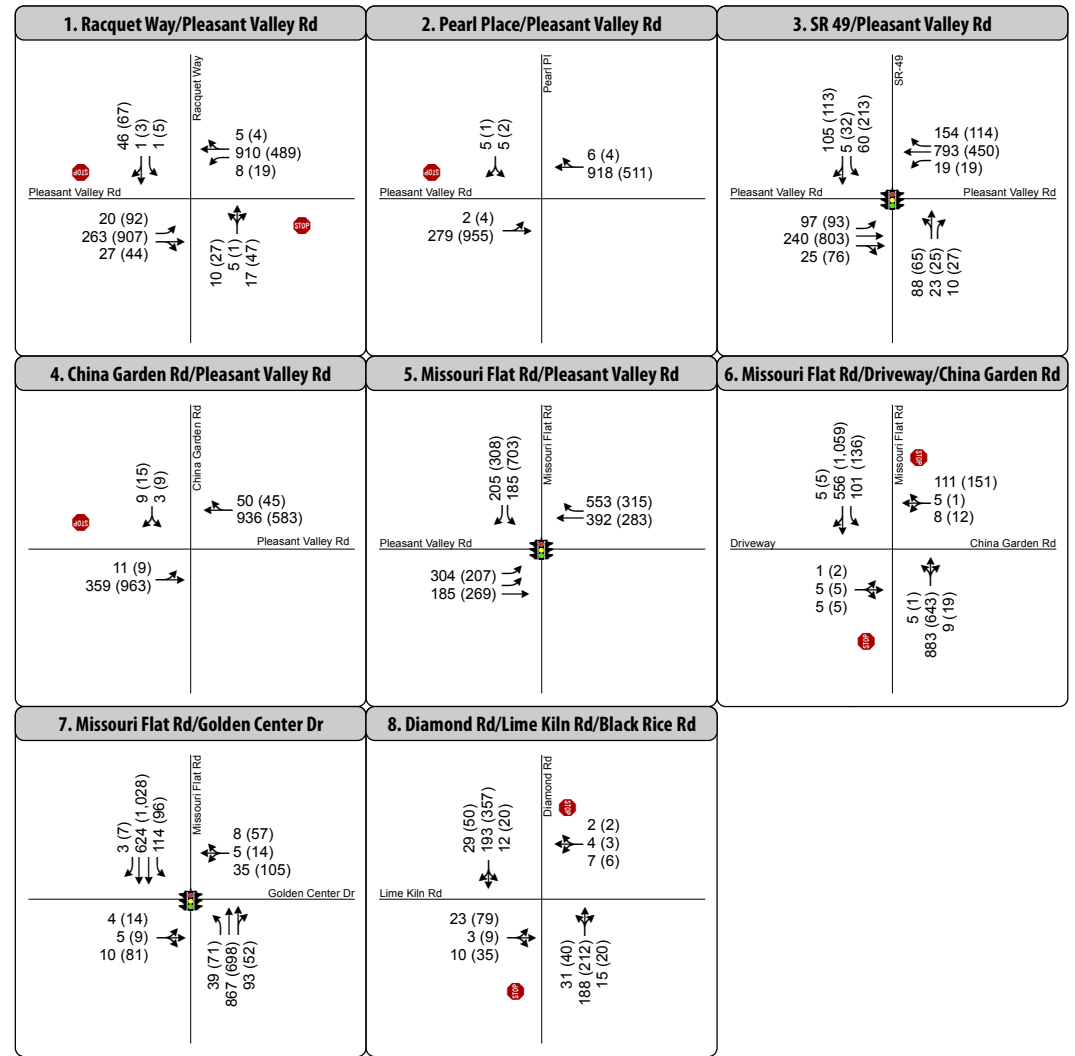


Figure 1A

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

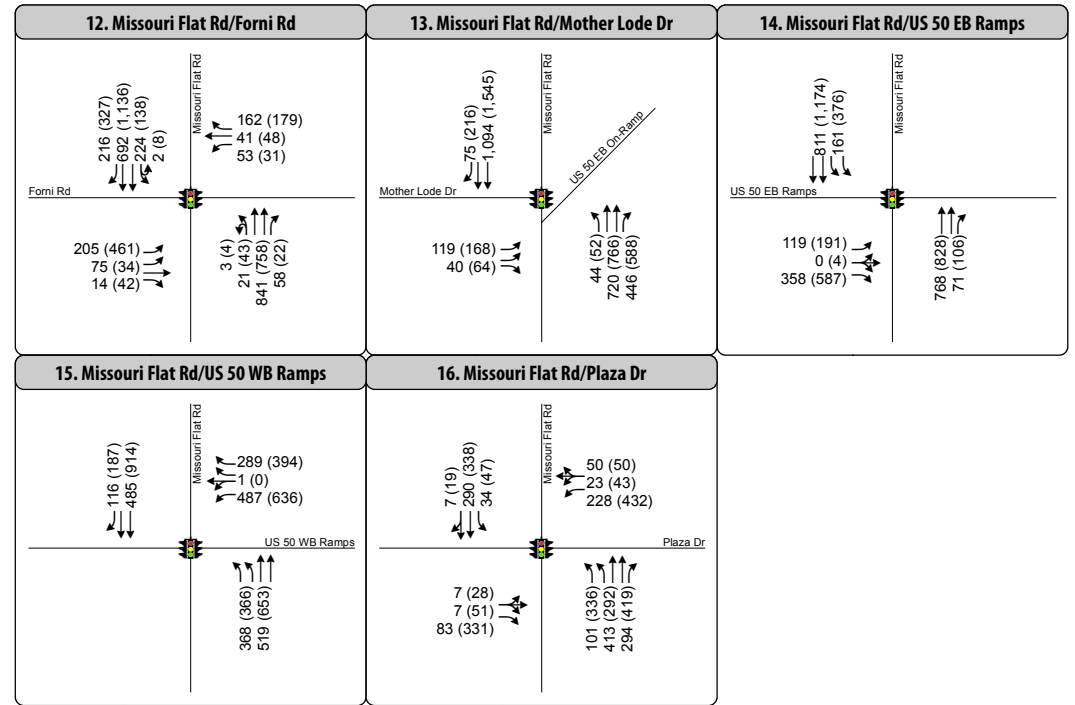
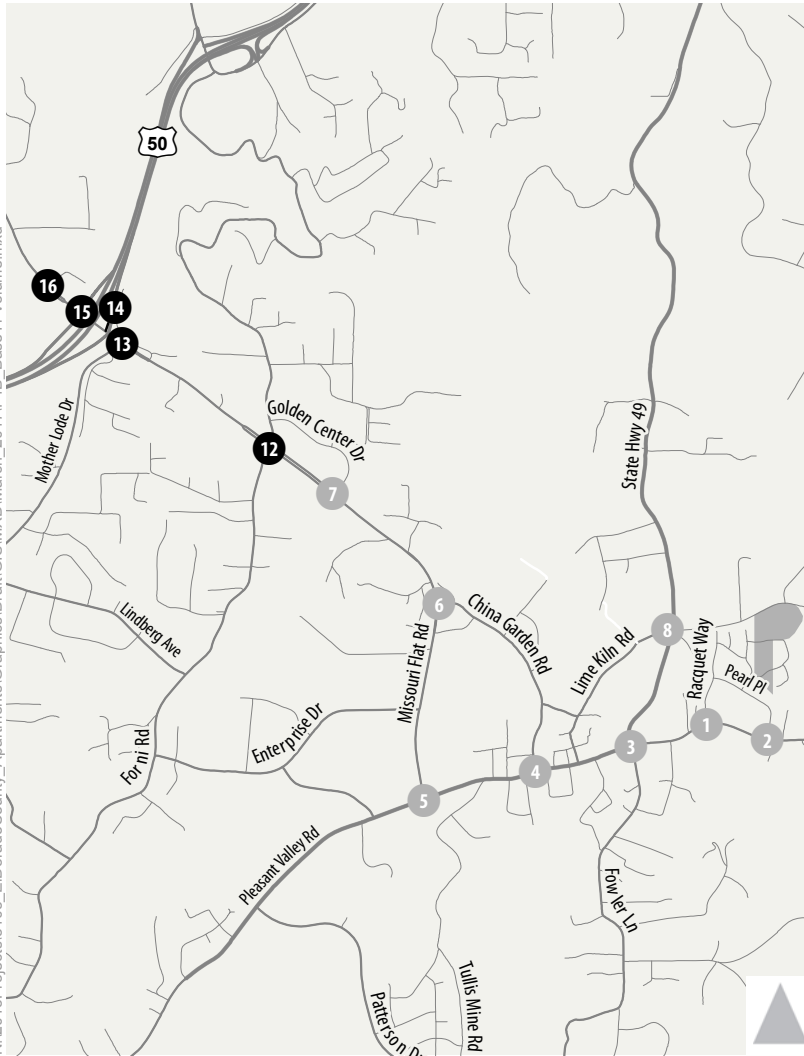


Figure 1B

Peak Hour Traffic Volumes
and Lane Configurations -
Existing Conditions

EXISTING CONDITIONS PEAK HOUR VEHICLE LEVEL OF SERVICE

INTERSECTIONS

Table 3 summarizes existing conditions AM and PM peak hour LOS for the study intersections. The LOS of a facility is a qualitative measure used to describe operating conditions. LOS ranges from A (best), which represents short delays, to LOS F (worst), which represents long delays and a facility that is operating at or near its functional capacity. Detailed LOS analysis sheets are contained in Appendix A. See Table 1 for a definition of LOS as it relates to intersection delay. As shown in Table 3, the Pleasant Valley Road/Racquet Way and Missouri Flat Road/China Garden Road intersections operate at LOS F during the PM peak hour. The remaining study intersections operate at LOS E or better during the AM and PM peak hours.

TABLE 3 PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING CONDITIONS					
Intersection	Control	AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS
1. Pleasant Valley Road/Racquet Way	SSSC	39	E	191	F
2. Pleasant Valley Road/Pearl Place	SSSC	24	C	28	D
3. Pleasant Valley Road (SR 49)/Diamond Road (SR 49)	Signal	22	C	16	B
4. Pleasant Valley Road (SR 49)/China Garden Road	SSSC	23	C	25	D
5. Pleasant Valley Road (SR 49)/Missouri Flat Road	Signal	12	B	41	D
6. Missouri Flat Road/China Garden Road	SSSC	49	E	108	F
7. Missouri Flat Road/Golden Center Drive	Signal	10	B	14	B
8. Diamond Road/Lime Kiln Road/ Black Rice Road	SSSC	7	A	17	B
12. Missouri Flat Road/Forni Road	Signal	23	C	29	C
13. Missouri Flat Road/Mother Lode Drive	Signal	10	B	12	B
14. Missouri Flat Road/US 50 EB Ramps	Signal	19	B	28	C
15. Missouri Flat Road/US 50 WB Ramps	Signal	26	C	28	C
16. Missouri Flat Road/Plaza Drive	Signal	17	B	25	C
Notes: SSSC = side street stop control, AWSC = all way stop control, N/A = Not Applicable (future intersection) ¹ For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For unsignalized (side street stop controlled) intersections, average intersection delay is reported in seconds per vehicle for the overall intersection (worst movement). All results are rounded to the nearest second. Bold text indicates LOS worse than established threshold. Source: Fehr & Peers, 2015					



ROADWAY SEGMENTS

Table 4 summarizes existing conditions AM and PM peak hour LOS for the study roadway segments. All of the study roadway segments operate at acceptable levels (LOS E or better) during the AM and PM peak hours. Detailed LOS analysis sheets are provided in Appendix A. See Table 2 for a definition of LOS as it relates to roadway segments.

TABLE 4 PEAK HOUR ROADWAY SEGMENT LEVEL OF SERVICE – EXISTING CONDITIONS							
Roadway Segment	Classification	AM Peak Hour			PM Peak Hour		
		Peak Hour Volume ¹	LOS	v/c Ratio ²	Peak Hour Volume ¹	LOS	v/c Ratio ²
Missouri Flat Road – Golden Center Drive to US 50	4AU	1,650	C ³	0.53	1,900	D	0.61
Missouri Flat Road – Pleasant Valley Road (SR 49) to Golden Center Dr	2A	1,290	D	0.78	1,540	D	0.93
Pleasant Valley Road (SR 49) – Missouri Flat Road to SR 49 (West)	2A	1,090	D	0.66	1,070	D	0.65
Pleasant Valley Road (SR 49) – Diamond Road (SR 49) to Missouri Flat Rd	2A	1,320	D	0.80	1,570	E	0.95
Pleasant Valley Road (SR 49) – Canyon Valley Road to Diamond Road (SR 49)	2A	1,200	D	0.73	1,280	D	0.78
Pleasant Valley Road (SR 49) – Big Cut Road to Canyon Valley Road	2A	1,070	D	0.65	1,100	D	0.67
Diamond Road (SR 49) – Pleasant Valley Road to Happy Lane	2A	450	C ³	0.27	930	D	0.56
Diamond Road (SR 49) – Diamond Springs Parkway to Bradley Drive	2A	570	C ³	0.35	790	C ³	0.48
China Garden Road – Missouri Flat Road to China Garden Court	2A	240	C ³	0.15	330	C ³	0.20
Diamond Springs Parkway – Throwita Way to Missouri Flat Road	NA	NA	NA	NA	NA	NA	NA
Notes: 4AU = Four-Lane Arterial, Undivided, 2A = Two-Lane Arterial, NA = Not Applicable (future roadway) ¹ Two-way peak hour traffic volume ² v/c = volume-to-capacity ³ LOS at this location is C or better Source: Fehr & Peers, 2015							





PEDESTRIAN CIRCULATION

Pedestrian facilities are limited near the project, with sporadic sections of sidewalk Pearl Place and Diamond Road (SR 49). There are a small number of very short segments of sidewalk on Pleasant Valley Road (SR 49) between China Garden Road and Diamond Road (SR 49). A short segment of sidewalk also exists on the west side of Missouri Flat Road north of Pleasant Valley Road adjacent to the Missouri Flat Storage Depot.

BICYCLE CIRCULATION

Bicycle facilities are classified into three categories:

- Class I Bicycle Path – Off-street bike paths within exclusive right-of-way; usually shared with pedestrians
- Class II Bicycle Lane – Striped on-road bike lanes adjacent to the outside travel lane on preferred corridors for biking
- Class III Bicycle Route – Shared on-road facility, usually delineated by signage and pavement markings

In the study area, according to the *El Dorado Bicycle Transportation Plan, 2010 Update (El Dorado County Transportation Commission)* and field observations, the following major bikeway facilities are present within the study area:

- Class II bicycle lanes on Missouri Flat Road between Plaza Drive and Golden Center Drive.
- Class I bicycle path (El Dorado Trail) between Missouri Flat Road Diamond Road. The trail connects to the east side of Missouri Flat Road and extends northeast to Forni Road near the El Dorado County Jail in Placerville, California.

Class II bicycle lanes are planned (where they do not currently exist) for Pleasant Valley Road, Diamond Road, Missouri Flat Road, and the future Diamond Springs Parkway.

TRANSIT

Transit service in El Dorado County is provided by the El Dorado County Transit Authority (El Dorado Transit), which offers local fixed route, regional commuter route, dial-a-ride, and paratransit service. There are seven local fixed routes, four of which have stops on Missouri Flat Road and/or Pleasant Valley Road.





The Diamond Springs route runs from Folsom Lake College – El Dorado Center north of US 50, along Missouri Flat Road, to Pleasant Valley Road. The Diamond Springs route travels along Pleasant Valley Road between Oriental Street and Pearl Place. Weekday service is provided from 7:00 AM to 6:48 PM with one hour headways. The project is served by the Diamond Springs Line (Routh 30/35) and a bus stop is located within 500 feet of the project.

The Placerville route runs from the Missouri Flat Transfer Station to the Gold Country Inn in Placerville. Weekday service is provided from 7:00 AM to 7:00 PM with one hour headways.

The 50 Express route is a commuter route that runs from the Missouri Flat Transfer Station to the Folsom Iron Point light rail station. Weekday service is provided from 6:00 AM to 7:00 PM with one hour headways.

The Sacramento Commuter provides 11 morning trips and 11 afternoon trips between El Dorado County and downtown Sacramento. Weekday service is provided in the morning from 5:00 AM to 10:30 AM and in the afternoon from 2:00 PM to 6:30 PM.



EXISTING PLUS PROJECT CONDITIONS

TRIP GENERATION

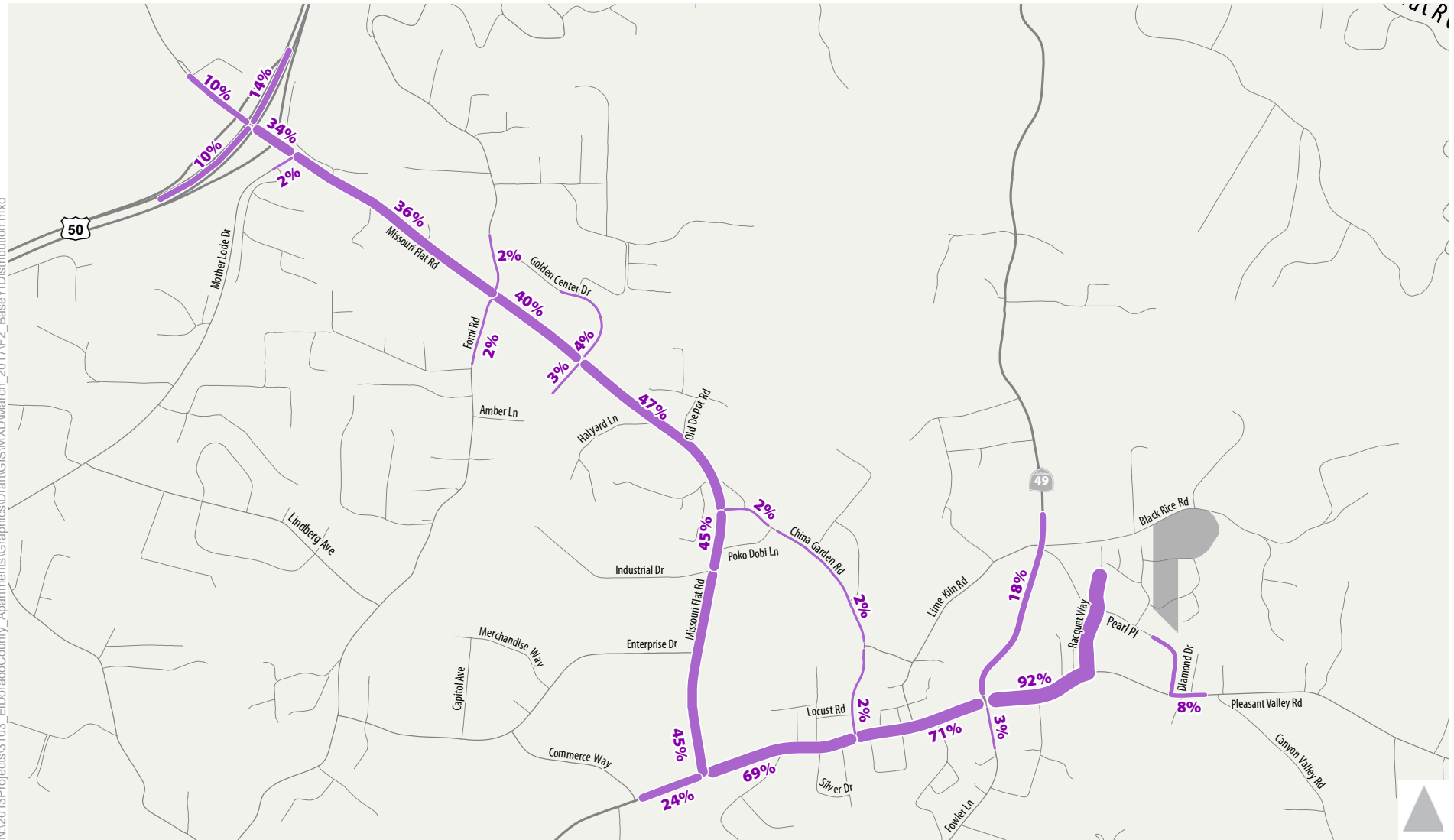
Trip generation estimates were calculated based on methodologies and trip generation equations presented in the Institute of Transportation Engineers' *Trip Generation Manual*, 9th Edition. Table 5 shows the AM and PM peak hour trip generation estimates for the proposed project. As shown in the table, the project will generate 43 AM peak hour trips and 62 PM peak hour trips.

TABLE 5 PROJECT TRIP GENERATION							
Land Use	Quantity	AM Trips ¹			PM Trips ²		
		Total	In	Out	Total	In	Out
Apartment (220)	81	43	9	34	62	40	22
Notes: ¹ AM trips calculated based on $T=0.49(X)+3.73$ (with 20% entering and 80% exiting). PM trips calculated based on $T=0.55(X)+17.65$ (with 65% entering and 35% exiting). Source: Fehr & Peers, 2015							

TRIP DISTRIBUTION AND ASSIGNMENT

The expected distribution of project trips was developed using the El Dorado County travel demand model. A select zone analysis of the project traffic analysis zone (TAZ) was performed to determine how vehicles travelling to and from the proposed project would interact with nearby land uses and use the surrounding roadway network. Figure 2 shows the existing conditions project trip distribution for the project. As shown in the figure, approximately 40 percent of the project trips will travel north on Missouri Flat Road, 8 percent will travel east on Pleasant Valley Road (SR 49), 24 percent will travel west on Pleasant Valley Road (SR 49), 18 percent travel north on Diamond Road (SR 49), and 10 percent will remain on the local roads within Diamond Springs. Figure 3 shows the corresponding AM and PM peak hour intersection turning movement forecasts for Existing Plus Project conditions.





- 21% Trip Distribution
- Project Site

Figure 2



Peak Hour Trip Distribution - Existing Conditions

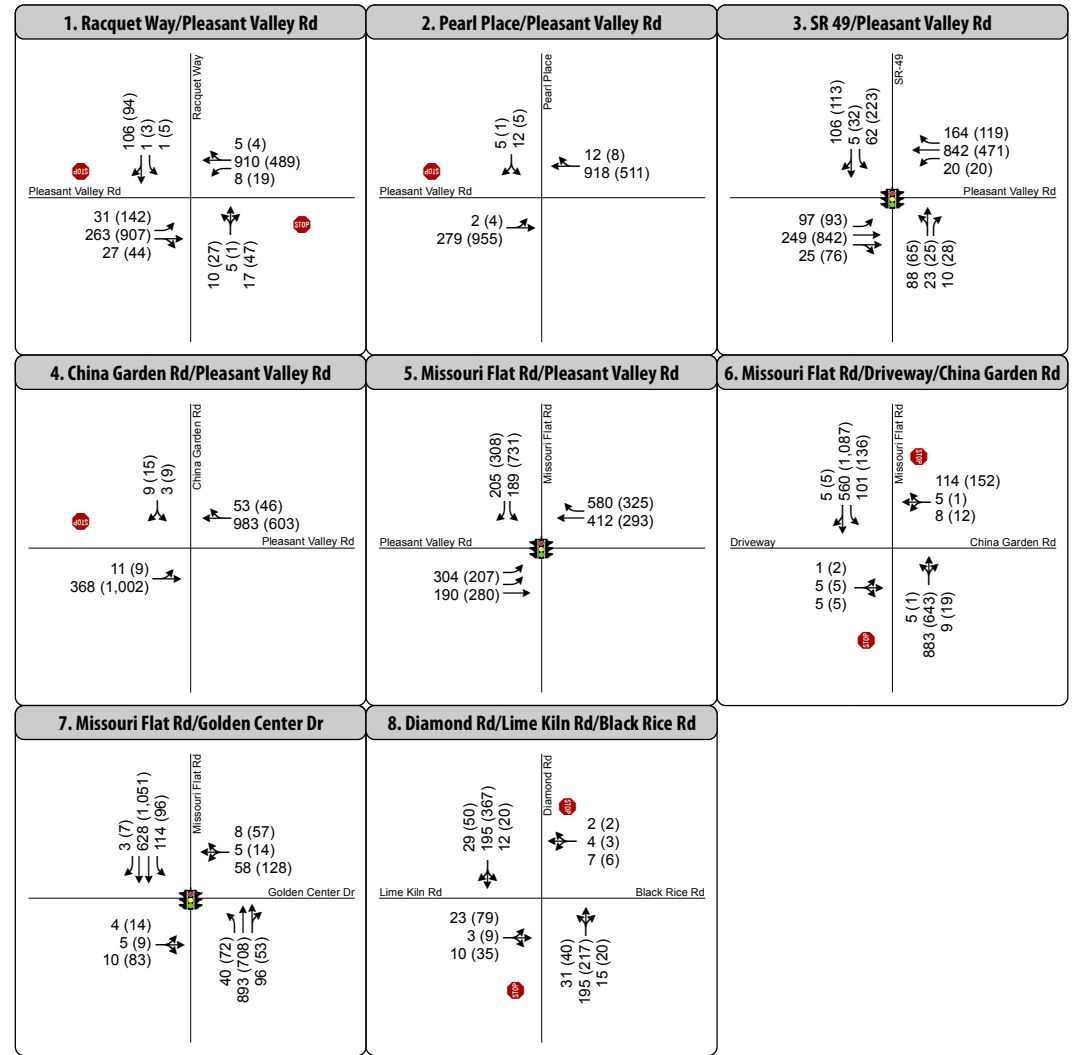
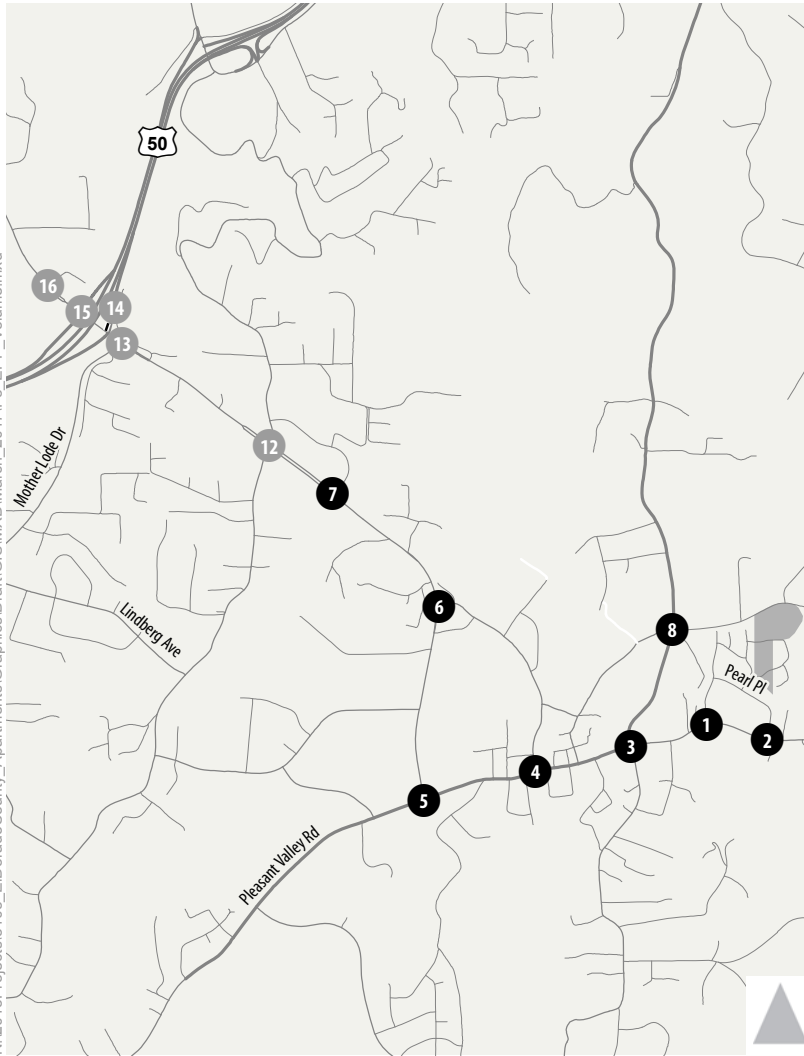


Figure 3A

Peak Hour Traffic Volumes
and Lane Configurations -
Existing Plus Project Conditions

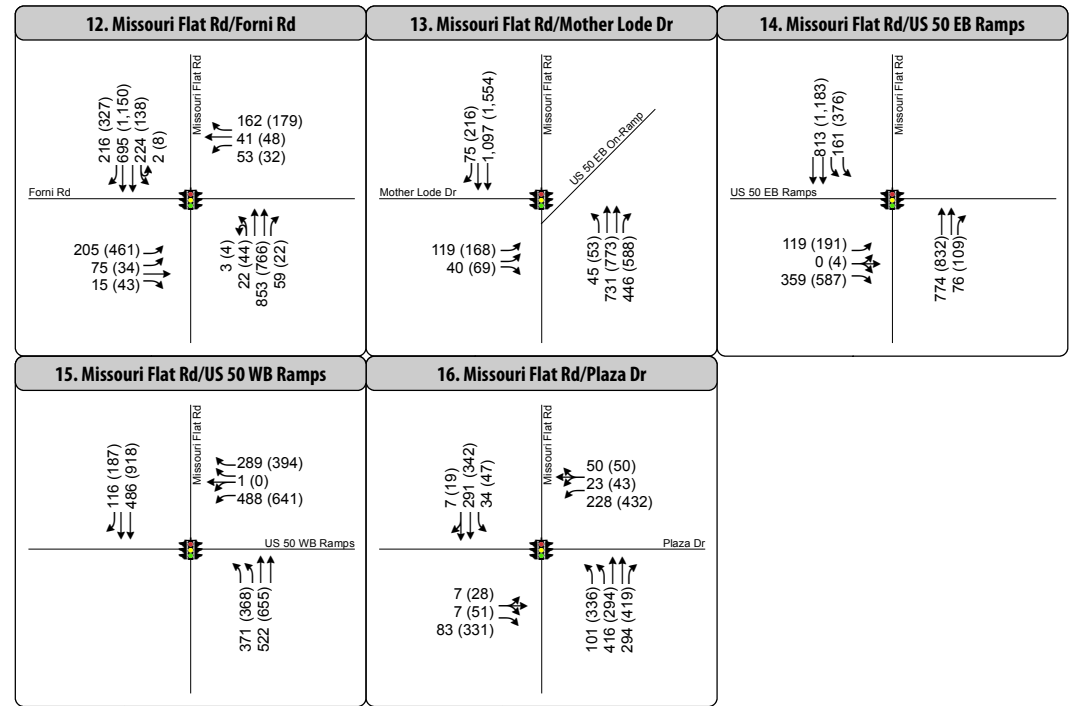
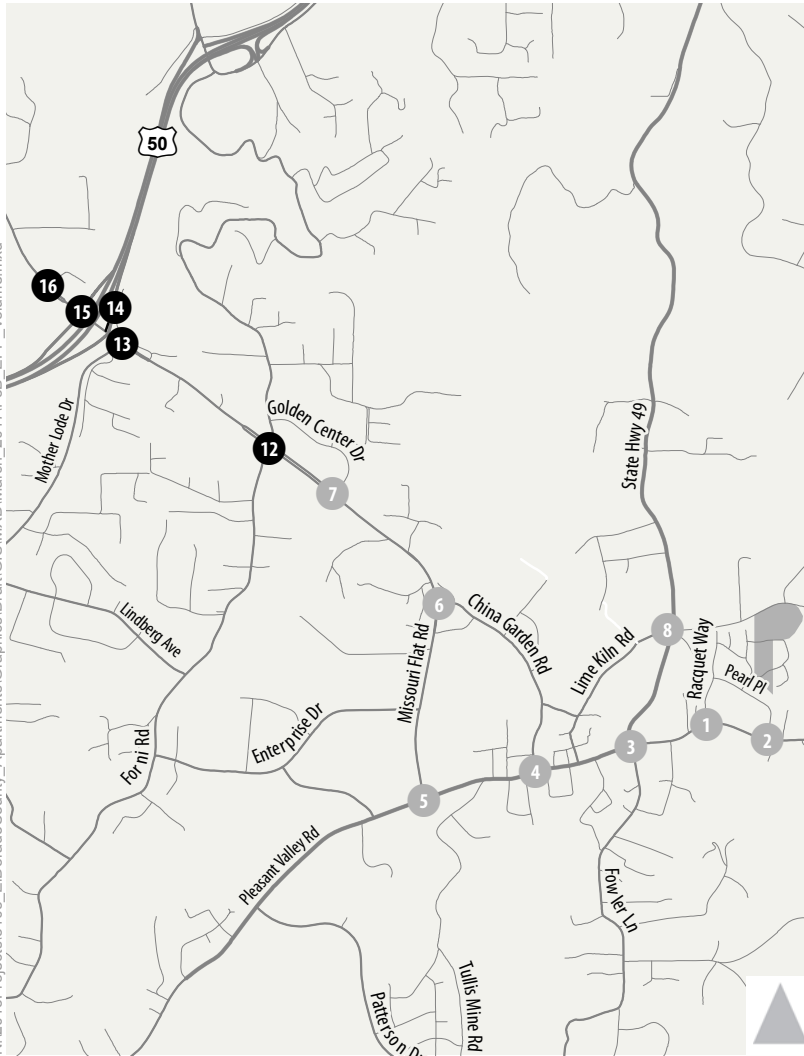


Figure 3B

Peak Hour Traffic Volumes
and Lane Configurations -
Existing Plus Project Conditions



PEAK HOUR VEHICLE LEVEL OF SERVICE

Project generated traffic volumes were added to the existing traffic volumes at the study intersections and roadway segments for the existing plus project conditions analysis.

INTERSECTIONS

Analysis results, which are presented in Table 6, indicate that most study intersections will operate acceptably, except for the side street stop controlled Pleasant Valley Road/Racquet Way and Missouri Flat Road/China Garden Road intersections, which will operate at LOS F during the PM peak hour. Traffic generated by the project will result in potential impacts at the following locations:

- Pleasant Valley Road/Racquet Way (intersection 1) – This intersection operates at LOS F without the project. The project adds more than 100 seconds of delay to the side street approach during the PM peak hour. According to established significance criteria, the project is projected to “worsen” conditions, since it would add more than 10 trips and increase the overall intersection volume by more than 2 percent during the PM peak hour.
- Missouri Flat Road/China Garden Road (intersection 6) – This location operates at LOS F without the project. The project will increase delay at the intersection by 3 seconds during the PM peak hour. Based on established significance criteria, the project is projected to “worsen” conditions, since it would add more than 10 trips to the intersection during the PM peak hour.



TABLE 6 PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS

Intersection	Control	Existing				Existing Plus Project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1. Pleasant Valley Road/Racquet Way	SSSC	39	E	191	F	41	E	<u>>300</u>	F
2. Pleasant Valley Road/Pearl Place	SSSC	24	C	28	D	26	D	33	D
3. Pleasant Valley Road (SR 49)/Diamond Road (SR 49)	Signal	22	C	16	B	24	C	17	B
4. Pleasant Valley Road (SR 49)/China Garden Road	SSSC	23	C	25	D	24	C	27	D
5. Pleasant Valley Road (SR 49)/Missouri Flat Road	Signal	12	B	41	D	12	B	50	D
6. Missouri Flat Road/China Garden Road	SSSC	49	E	108	F	49	E	111	F
7. Missouri Flat Road/Golden Center Drive	Signal	10	B	14	B	12	B	16	B
8. Diamond Road/Lime Kiln Road/ Black Rice Road	SSSC	13	B	22	C	13	B	23	C
12. Missouri Flat Road/Forni Road	Signal	23	C	29	C	21	C	26	C
13. Missouri Flat Road/Mother Lode Drive	Signal	10	B	12	B	10	B	12	B
14. Missouri Flat Road/US 50 EB Ramps	Signal	19	B	28	C	19	B	28	C
15. Missouri Flat Road/US 50 WB Ramps	Signal	26	C	28	C	27	B	29	C
16. Missouri Flat Road/Plaza Drive	Signal	17	B	25	C	17	B	25	C

Notes: SSSC = side street stop control, AWSC = all way stop control, N/A = Not Applicable (future intersection)

¹ For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For unsignalized (side street stop controlled) intersections, average intersection delay is reported in seconds per vehicle for the overall intersection (worst movement). All results are rounded to the nearest second.

Bold text indicates LOS worse than established threshold. *Italic and underlined* text identifies a potential impact.

Source: Fehr & Peers, 2015



VEHICLE QUEUING

Table 7 shows the average maximum queue length for selected movements in the project area under existing plus project conditions.

TABLE 7 AVERAGE MAXIMUM QUEUE LENGTH – EXISTING PLUS PROJECT CONDITIONS			
Intersection	Movement	Storage Length [feet]	PM Peak Hour
12. Missouri Flat Road/Forni Road	EB LT	200	<u>400</u>
	EB TH	>1,000	550
	EB RT	160	<u>200</u>
	NB LT	240	<u>350</u>
	NB TH	1,025	575
	NB RT	160	<u>250</u>
	WB LT	200	125
	WB TH	>1,000	175
	WB RT	200	<u>250</u>
	SB LT	300	<u>400</u>
	SB TH	2,315	1,325
	SB RT	160	<u>250</u>
13. Missouri Flat Road/Mother Lode Drive	NB TH	2,315	500
14. Missouri Flat Road/US 50 EB Ramps	EB LT	1,150	900
	EB RT	550	<u>775</u>
	NB TH	175	<u>225</u>
	NB RT	80	<u>200</u>
	SB LT	140	<u>250</u>
	SB TH	450	<u>500</u>
15. Missouri Flat Road/US 50 WB Ramps	NB LT	140	<u>250</u>
	NB TH	450	400
	WB LT/TH	1,475	975
	WB RT	1,475	775
	SB TH	450	<u>500</u>
	SB RT	380	<u>450</u>
Notes: <u>Bold and underline</u> font indicate a queue that exceeds the storage length.			
Source: Fehr & Peers, 2015			

ROADWAY SEGMENTS

Analysis results, which are presented in Table 8, indicate that all study roadway segments will operate acceptably during the AM and PM peak hours.



TABLE 8 PEAK HOUR ROADWAY SEGMENT LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS

Roadway Segment	Classification	Existing						Existing Plus Project					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
		Vol ¹	LOS	v/c ²	Vol ¹	LOS	v/c ²	Vol ¹	LOS	v/c ²	Vol ¹	LOS	v/c ²
Missouri Flat Road – Golden Center Drive to US 50	4AU	1,650	C ³	0.53	1,900	D	0.61	1,675	C ³	0.54	1,934	D	0.62
Missouri Flat Road – Pleasant Valley Road (SR 49) to Golden Center Dr	2A	1,290	D	0.78	1,540	D	0.93	1,318	D	0.80	1,578	E	0.96
Pleasant Valley Road (SR 49) – Missouri Flat Road to SR 49 (West)	2A	1,090	D	0.66	1,070	D	0.65	1,105	D	0.67	1,090	D	0.66
Pleasant Valley Road (SR 49) – Diamond Road (SR 49) to Missouri Flat Rd	2A	1,320	D	0.80	1,570	E	0.95	1,364	D	0.83	1,629	E	0.99
Pleasant Valley Road (SR 49) – Canyon Valley Road to Diamond Road (SR 49)	2A	1,200	D	0.73	1,280	D	0.78	1,205	D	0.73	1,287	D	0.78
Pleasant Valley Road (SR 49) – Big Cut Road to Canyon Valley Road	2A	1,070	D	0.65	1,100	D	0.67	1,075	D	0.65	1,107	D	0.67
Diamond Road (SR 49) – Pleasant Valley Road to Happy Lane	2A	450	C ³	0.27	930	D	0.56	461	C ³	0.28	945	D	0.57
Diamond Road (SR 49) – Diamond Springs Parkway to Bradley Drive	2A	570	C ³	0.35	790	C ³	0.48	581	C ³	0.35	805	C ³	0.49
China Garden Road – Missouri Flat Road to China Garden Court	2A	240	C ³	0.15	330	C ³	0.20	241	C ³	0.15	332	C ³	0.20
Diamond Springs Parkway – Throwita Way to Missouri Flat Road	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: 4AU = Four-Lane Arterial, Undivided, 2A = Two-Lane Arterial, NA = Not Applicable (future roadway)

¹ Two-way peak hour traffic volume

² v/c = volume-to-capacity ratio

³ LOS at this location is C or better

Bold text indicates LOS worse than established threshold. *Italic and underlined* text identifies a potential impact.

Source: Fehr & Peers, 2015





CUMULATIVE CONDITIONS

This section presents the development and analysis of cumulative conditions.

TRAVEL DEMAND FORECASTS

For this project, a modified version of the El Dorado County Travel Demand Forecasting Model (EDC-CAT_7525_090514) was used to develop traffic volume forecasts in the study area. The base year model validation for study area roadways was documented in a technical report for the Diamond Springs and El Dorado Area Mobility and Livable Community Plan (Fehr & Peers, February 2014), and is presented again below. As is standard practice with large area travel demand models, a thorough model review was completed and the model was refined to ensure that it produced reasonable results in the study area.

The following refinements were implemented in the study area:

- Added roadway network detail
- Updated land use to reflect existing commercial (i.e., retail and office) employment along the Missouri Flat Road corridor (i.e., near the US 50 interchange). Employment calculated was based on measured building area, existing land uses, and industry employment yields for retail and office land use, resulting in the addition of about 510 employees.
- Updated network attributes in the study area to reflect existing conditions (e.g. verified roadway network speeds, number of lanes on the roadway, and roadway capacities to reflect existing conditions)
- Updated the future year roadway network in the study area to reflect the County's Capital Improvement Program (2015 CIP)

Specific information related to the model's performance is described below.

BASE YEAR MODEL VALIDATION

Before any model can be applied for use in a major specific plan application, it must first be evaluated to determine how the model performs relative to validation targets identified by Caltrans, the Federal Highways Administration (FHWA), and the California Transportation Commission (CTC). These targets were developed to ensure that a model is developed such that it can accurately forecast existing conditions based on land use and roadway network information, which improves the model's ability to accurately forecast





future conditions. The state-of-the-practice is to use a valid base year model when developing defensible forecasts for changes in the roadway network and/or changes in proposed land use.

Static Validation

The first step of any model validation is to ensure that the model generally produces similar results to existing counts. Please note that, since the model is being used to generate AM peak hour and PM peak hour forecasts, the model must be valid at our study facilities for both time periods.

Key metrics for model validation guidelines are described below:

- The volume-to-count ratio is computed by dividing the volume assigned by the model and the actual traffic count for individual roadways (or intersections). The volume-to-count ratio should be less than 10%.
- The deviation is the difference between the model volume and the actual count divided by the actual count. Caltrans provides guidance on the maximum allowable deviation by facility type (e.g. lower-volume roadways can have a higher deviation than higher-volume roadways). 75% of the study facilities should be within the maximum allowable deviation.
- The correlation coefficient estimates the correlation between the actual traffic counts and the estimated traffic volumes from the model. The correlation coefficient should be greater than 0.88.
- The percent Root Mean Square Error (RMSE) is the square root of the model volume minus the actual count squared divided by the number of counts. It is a measure similar to standard deviation in that it assesses the accuracy of the entire model. The RMSE should be less than 40%.

The model validation statistics are summarized in Table 9. As shown in Table 9, the model satisfies the identified model validation targets in the study area. As such, the model is deemed appropriate for use in this assessment.



TABLE 9 TRAVEL DEMAND FORECASTING MODEL SUBAREA STATIC VALIDATION		
Metric	Model Performance	Performance Target
AM Peak Hour		
Model/Count Ratio	0.97	Between 0.90 and 1.10
Percent Within Caltrans Maximum Deviation	95%	> 75%
Percent Root Mean Square Error	20%	< 40%
Correlation Coefficient	0.97	> 0.88
PM Peak Hour		
Model/Count Ratio	1.00	Between 0.90 and 1.10
Percent Within Caltrans Maximum Deviation	92%	> 75%
Percent Root Mean Square Error	21%	< 40%
Correlation Coefficient	0.96	> 0.88
Source: Fehr & Peers, 2015		

Dynamic Validation

Dynamic validation evaluates how a travel demand forecasting model responds to changes to model inputs. For this project, the El Dorado County travel demand model was used to develop forecasts for the study area (i.e., roadways and intersections) in response to planned population and employment growth and planned transportation improvements. Therefore, the dynamic validation focused on reviewing how the traffic model responded (i.e., in direction and magnitude) to changes to roadway network and land use inputs. The model responded in the correct direction and expected magnitude as inputs were changed. As such, the model is deemed appropriate for use in this assessment.

FUTURE YEAR MODELING ASSUMPTIONS

All modifications incorporated into the validated Base Year model were incorporated into the future year (2035) travel demand forecasting model. Additionally, as previously mentioned, the model was also updated to include only the County's 2015 CIP.

As described above, the validated El Dorado County model was used to develop AM and PM peak hour forecasts for Cumulative No Project conditions, which corresponds to a 2035 horizon year that accounts for planned (and funded) roadway improvements, land use growth consistent with the 2004 General Plan, and with approved and reasonably foreseeable projects in the study area (based on coordination with the Missouri Flat Area Master Plan Circulation and Financing Plan Phase II), including the following:





- Crossings at El Dorado
- Social Security Administration Office
- Public Safety Facility
- Diamond Dorado Retail Center
- Creekside Plaza
- New Placerville Courthouse
- Piedmont Oaks

Consistent with accepted travel demand forecasting practice, model error was corrected using the methodologies identified in the National Cooperative Highway Research Program Report 255 (Transportation Research Board, 1982) using the “difference method” (e.g., add model predicted growth to existing volumes) for roadway segments and intersections.

Under cumulative conditions, the future Diamond Springs Parkway is expected to be constructed; therefore, the project trip distribution will change. Project trips were added to the study intersection using the trip distribution shown on Figure 4. As shown in the figure, the overall distribution will remain the same, however approximately 19 percent of trips will use Diamond Springs Parkway rather than Pleasant Valley Road to travel north on Missouri Flat Road. Figures 5A and 5B present AM and PM peak hour traffic volume forecasts under Cumulative conditions.

PEAK HOUR VEHICLE LEVEL OF SERVICE

INTERSECTIONS

Table 10 summarizes the AM and PM peak hour intersection operations under cumulative plus project conditions. The analysis results indicate that three study intersections will operate acceptably during the AM peak hour and four study intersections will operate acceptably during the PM peak hour. Traffic generated by the project will result in potential impacts at the following locations:

- Pleasant Valley Road/Racquet Way (Intersection 1) – This intersection will operate at LOS F under cumulative plus project conditions during the AM and PM peak hours. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips and increase the overall intersection volume by more than 2 percent during the AM and PM peak hours.
- Pleasant Valley Road /Pearl Place (Intersection 2) – This intersection will operate at LOS F under cumulative plus project conditions during the AM and PM peak hours. According to established



significance criteria, the project is not projected to “significantly worsen” conditions, since it would add less than 10 trips during the AM and PM peak hours.

- Missouri Flat Road/China Garden Road (Intersection 6) – This intersection will operate at LOS F under cumulative plus project conditions during the AM and PM peak hours. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips during the PM peak hour.
- Missouri Flat Road/Forni Road (Intersection 12) – This intersection will operate at LOS F under cumulative plus project conditions during the PM peak hours. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips during the PM peak hour.
- Missouri Flat Road/Plaza Drive (Intersection 16) – This intersection will operate at LOS F under cumulative plus project conditions during the PM peak hours. According to established significance criteria, the project is not projected to “significantly worsen” conditions, since it would add less than 10 trips during the PM peak hour.

TABLE 10 PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE CONDITIONS

Intersection	Control	Cumulative Plus Project			
		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS
1. Pleasant Valley Road/Racquet Way	SSSC	<u>>300</u>	F	<u>>300</u>	F
2. Pleasant Valley Road/Pearl Place	SSSC	100	F	104	F
3. Pleasant Valley Road (SR 49)/Diamond Road (SR 49)	Signal	74	E	35	D
4. Pleasant Valley Road (SR 49)/China Garden Road	SSSC	26	D	21	C
5. Missouri Flat Road /Pleasant Valley Road (SR 49)	Signal	15	B	22	C
6. Missouri Flat Road /China Garden Road	SSSC	53	F	E	48
7. Missouri Flat Road /Golden Center Drive	Signal	20	C	29	C
8. Diamond Road (SR 49)/Lime Kiln Road/Black Rice Road	SSSC	7	A	11	B
9. Missouri Flat Road /Diamond Springs Parkway	Signal	23	C	29	C
10. Diamond Springs Pkwy/Throwita Way	Signal	18	B	23	C
11. Diamond Road (SR 49)/Diamond Springs Parkway	Signal	24	C	35	C
12. Missouri Flat Road /Forni Road	Signal	40	D	112	F
13. Missouri Flat Road /Mother Lode Drive	Signal	15	B	31	C
14. Missouri Flat Road /US 50 EB Ramps	Signal	22	C	50	D



TABLE 10 PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE CONDITIONS

Intersection	Control	Cumulative Plus Project			
		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS
15. Missouri Flat Road /US 50 WB Ramps	Signal	21	C	72	E
16. Missouri Flat Road /Plaza Drive	Signal	16	B	<u>166</u>	<u>F</u>

Notes: SSSC = side street stop control, AWSC = all way stop control

¹ For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For unsignalized (side street stop controlled) intersections, average intersection delay is reported in seconds per vehicle for the overall intersection (worst movement). All results are rounded to the nearest second.

Bold text indicates LOS worse than established threshold. *Italic and underlined* text identifies a potential impact.

Source: Fehr & Peers, 2015

VEHICLE QUEUING

Table 11 shows the average maximum queue length for selected movements in the project area under cumulative plus project conditions.

TABLE 11 AVERAGE MAXIMUM QUEUE LENGTH – CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Movement	Storage Length [feet]	PM Peak Hour
15. Missouri Flat Road/US 50 WB Ramps	NB LT	140	<u>250</u>
	NB TH	450	425
	WB LT	1,475	825
	WB RT	1,475	870
	SB TH	450	<u>500</u>
	SB RT	380	<u>450</u>
14. Missouri Flat Road/US 50 EB Ramps	EB LT	1,150	500
	EB RT	550	<u>750</u>
	NB TH	175	<u>200</u>
	NB RT	80	<u>175</u>
	SB LT	140	<u>250</u>
	SB TH	450	<u>500</u>
13. Missouri Flat Road/Mother Lode Drive	NB TH	2,315	525
12. Missouri Flat Road/Forni Road	EB LT	200	<u>400</u>
	EB TH	>1,000	800
	EB RT	160	<u>200</u>
	NB LT	240	<u>350</u>



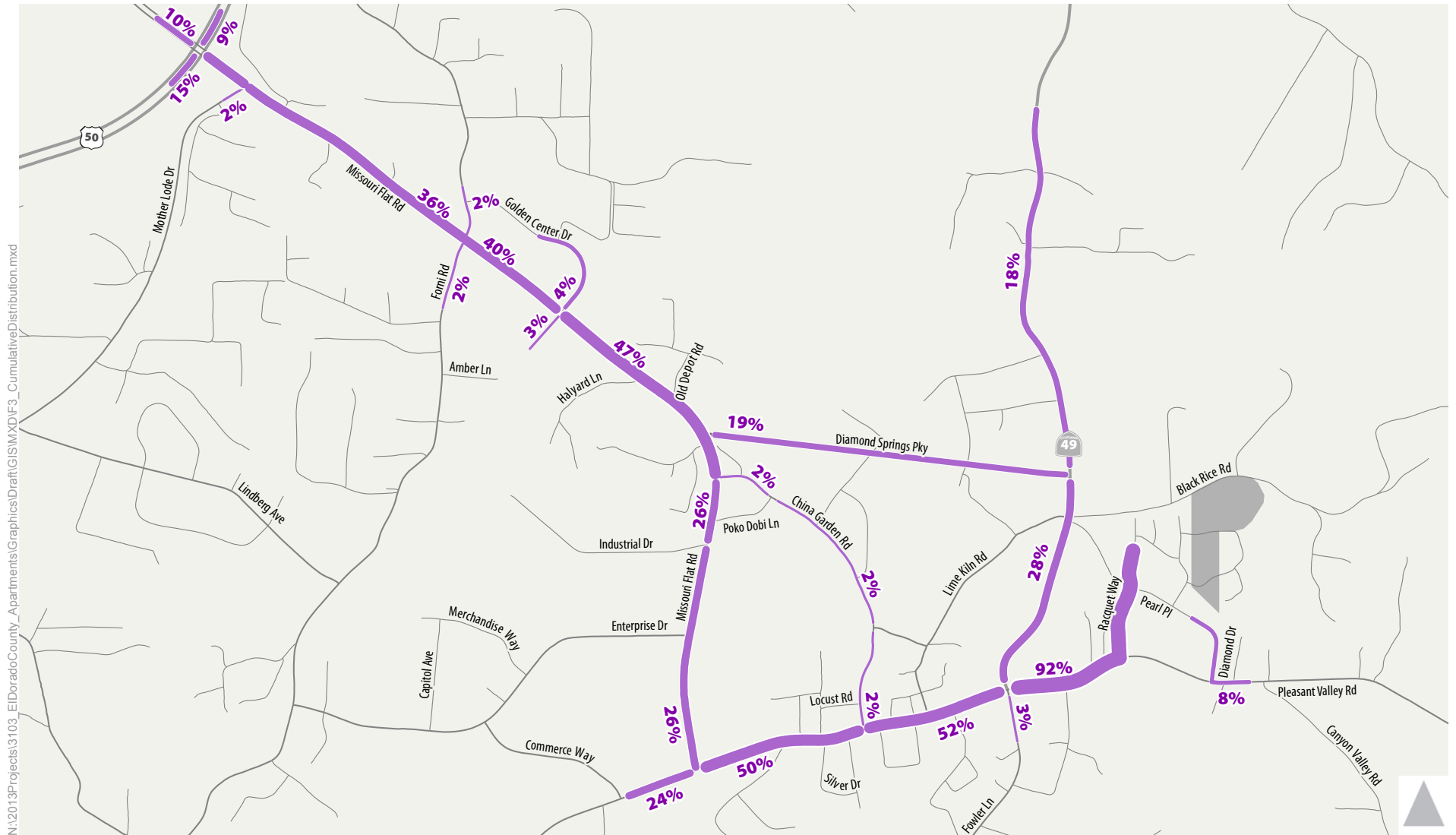
TABLE 11 AVERAGE MAXIMUM QUEUE LENGTH – CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Movement	Storage Length [feet]	PM Peak Hour
	NB TH	1,025	600
	NB RT	160	<u>250</u>
	WB LT	200	125
	WB TH	>1,000	175
	WB RT	200	<u>250</u>
	SB LT	300	<u>400</u>
	SB TH	2,315	<u>2,375</u>
	SB RT	160	<u>250</u>
9. Missouri Flat Road/Diamond Springs Parkway	EB LT	275	<u>325</u>
	EB TH	1,400	425
	EB RT	350	<u>425</u>
	NB LT	800	350
	NB TH/RT	315	225
	WB LT	430	175
	WB TH	2,250	275
	WB RT	180	100
	SB LT/TH/RT	200	100
10. Diamond Road (SR 49)/Diamond Springs Parkway	EB LT	375	375
	EB TH	1,000	150
	EB RT	1,000	450
	NB LT	750	250
	NB TH/RT	750	350
	WB LT/TH	820	200
	WB RT	150	50
	SB LT	150	<u>250</u>
	SB TH	600	600
	SB RT	150	<u>250</u>
Notes: <u>Bold and underline</u> font indicate a queue that exceeds the storage length.			
Source: Fehr & Peers, 2015			

ROADWAY SEGMENTS

Analysis results, which are presented in Table 12, indicate that most study roadway segments will operate acceptably during the AM and PM peak hours except for the segment of Missouri Flat Road from Diamond Springs Parkway to US 50, which will operate at LOS F (at the LOS E/LOS F threshold).





21% Trip Distribution
 Project Site

Figure 4

Peak Hour Trip Distribution - Cumulative Conditions

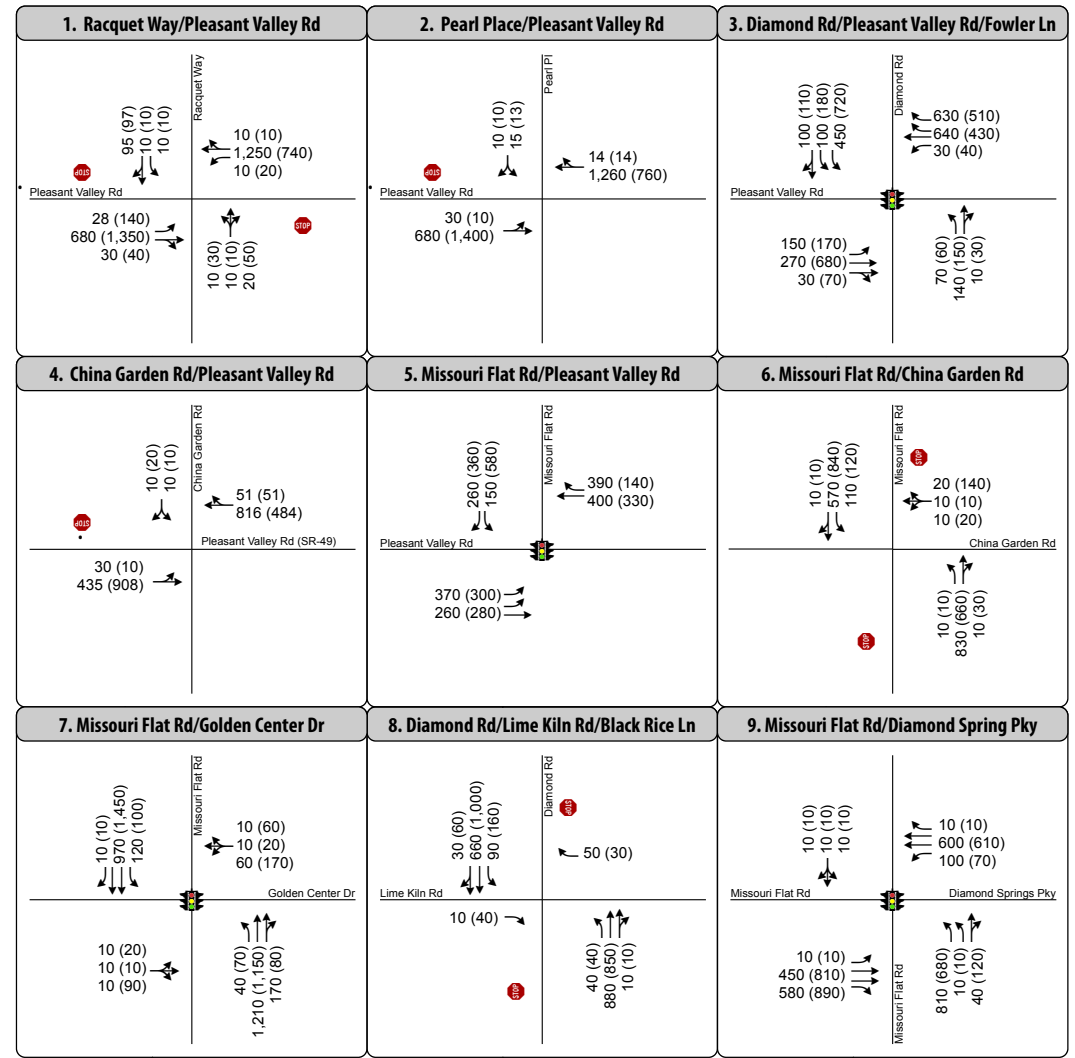
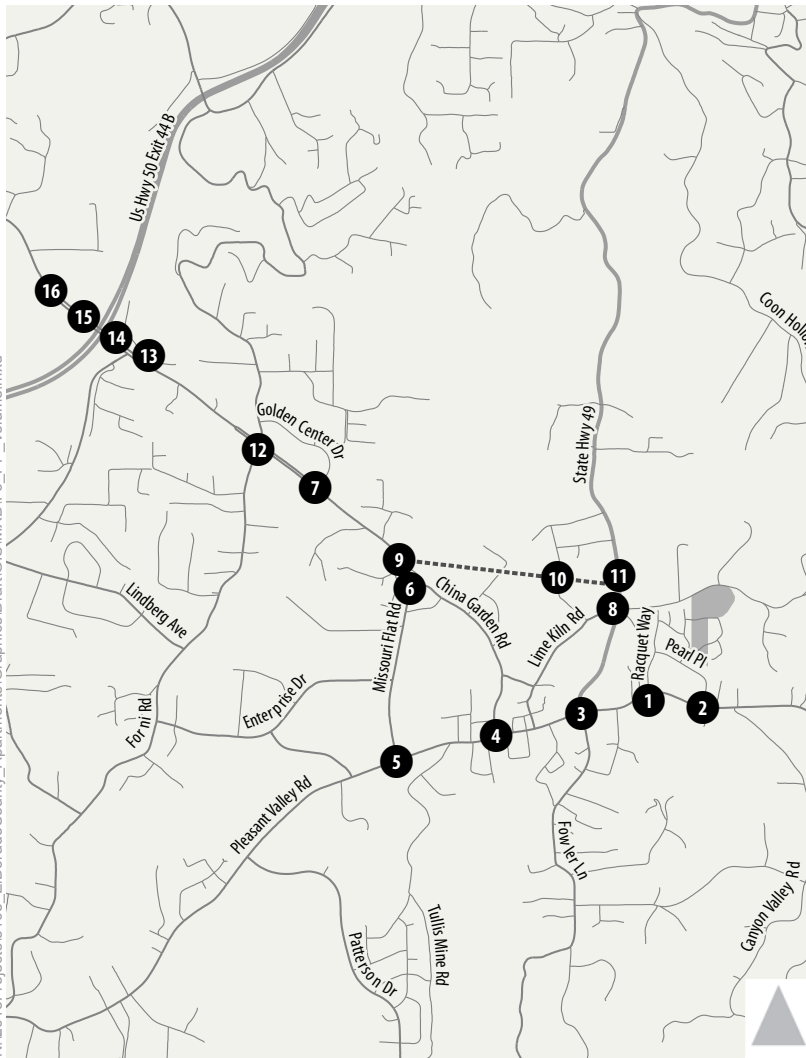


Figure 5A

Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project

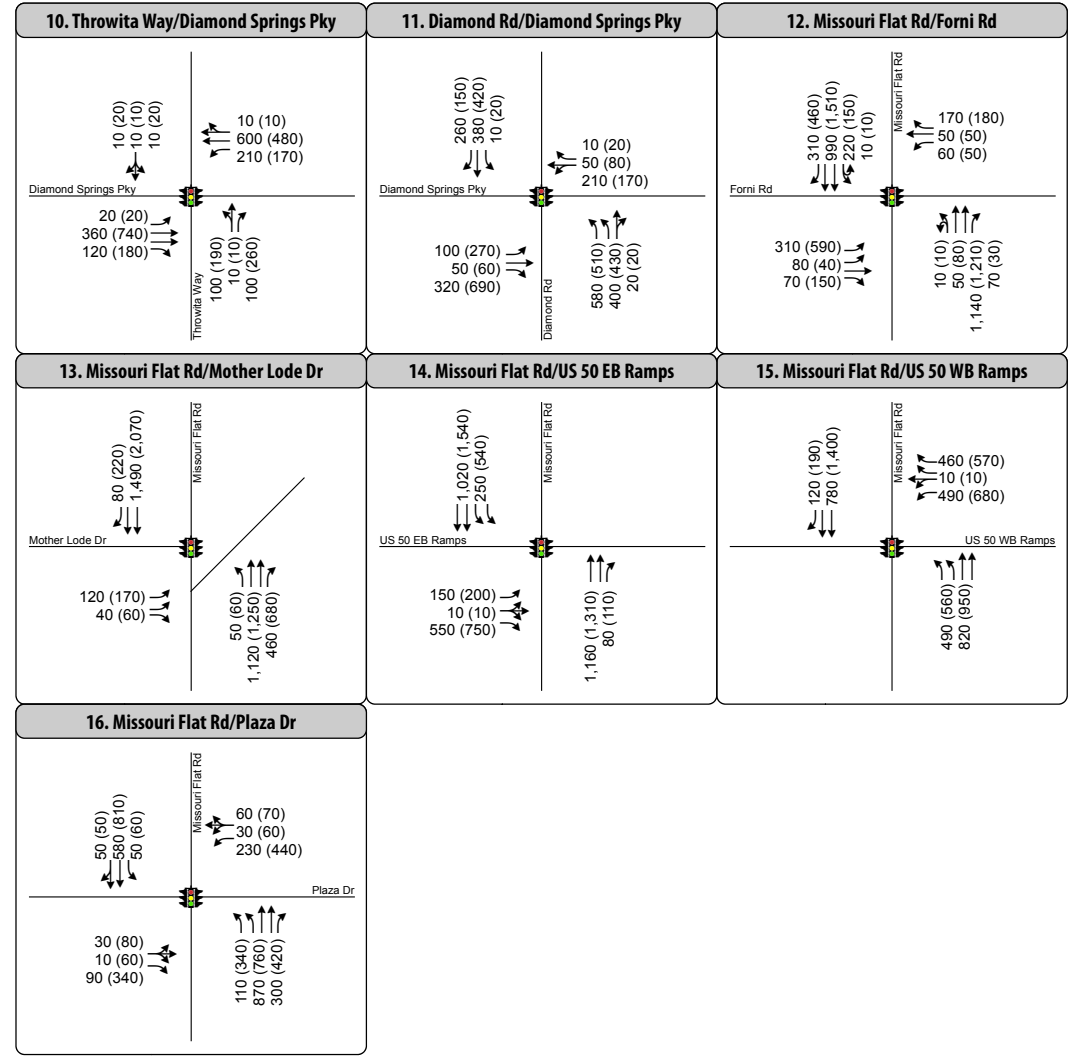
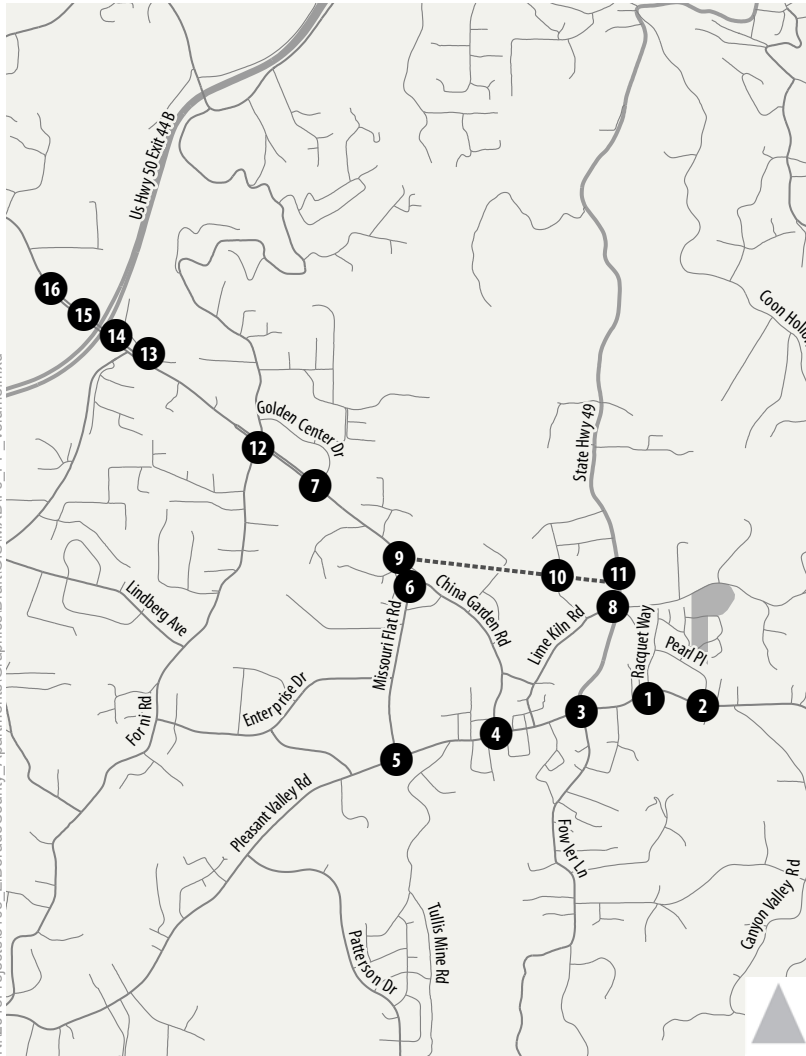


Figure 5B

Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project

TABLE 12 PEAK HOUR ROADWAY SEGMENT LEVEL OF SERVICE – CUMULATIVE CONDITIONS

Roadway Segment	Classification	Cumulative Plus Project					
		AM Peak Hour			PM Peak Hour		
		Vol ¹	LOS	v/c ²	Vol ¹	LOS	v/c ²
Missouri Flat Road – Diamond Springs Parkway to US 50 ⁴	4AD	2,650	D	0.81	3,300	<i>F</i>	<i><u>1.00</u></i>
Missouri Flat Road – Pleasant Valley Road (SR 49) to Diamond Springs Parkway	3A	1,540	B	0.62	1,770	C	0.72
Pleasant Valley Road (SR 49) – Missouri Flat Road to SR 49 (West)	2A	1,290	C	0.78	1,270	C	0.77
Pleasant Valley Road (SR 49) – Diamond Road (SR 49) to Missouri Flat Road	2A	1,260	C	0.76	1,520	D	0.92
Pleasant Valley Road (SR 49) – Canyon Valley Road to Diamond Road (SR 49)	2A	1,375	D	0.83	1,507	D	0.91
Pleasant Valley Road (SR 49) – Big Cut Road to Canyon Valley Road	2A	1,255	D	0.76	1,337	D	0.81
Diamond Road (SR 49) – Pleasant Valley Road to Happy Lane	4AD	1,570	C ³	0.48	1,840	C ³	0.56
Diamond Road (SR 49) – Diamond Springs Parkway to Bradley Drive	2A	1,160	D	0.70	1,310	D	0.79
China Garden Road – Missouri Flat Road to China Garden Court	2A	160	C ³	0.10	320	C ³	0.19
Diamond Springs Parkway – Throwita Way to Missouri Flat Road	4AD	1,210	C ³	0.37	1,630	C ³	0.50

Notes: 4AU = Four-Lane Arterial, Undivided, 2A = Two-Lane Arterial

¹ Two-way peak hour traffic volume

² v/c = volume-to-capacity ratio

³ LOS at this location is C or better

⁴ Average of roadway segments between Mother Lode Drive and Forni Road, Forni Road to Gold Center Drive, and Gold Center Drive to Diamond Springs Parkway.

Bold text indicates LOS worse than established threshold. *Italic and underlined* text identifies a potential impact.

Source: Fehr & Peers, 2015





IMPACT STATEMENTS AND MITIGATION MEASURES

Project impacts were determined by comparing conditions with the project to conditions without the project in accordance with the established significance criteria presented in the Thresholds of Significance section.

EXISTING PLUS PROJECT

Existing plus project conditions analysis results, presented in Tables 6 and 8, indicate that the addition of the project would exacerbate unacceptable operations at two intersections. The following discusses these impacts and associated mitigations. Table 13 summarizes the AM and PM peak hour intersection operations under existing plus project conditions with proposed mitigation.

INTERSECTIONS

Impacts

- Impact 1 - Pleasant Valley Road/Racquet Way (Intersection 1) – This intersection operates at LOS F without the project during the PM peak hour. The project adds more than 100 seconds of delay to the side street approach during the PM peak hour. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the PM peak hour. **This is a significant impact.**
- Impact 2 - Missouri Flat Road/China Garden Road (Intersection 6) – This location operates at LOS F without the project the PM peak hour. The project will increase delay at the intersection by 3 seconds during the PM peak hour. Based on established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the PM peak hour. **This is a significant impact.**

Mitigation

- Mitigation 1 - Pleasant Valley Road/Racquet Way (Intersection 1) – Implement one of the following improvements:
- Install traffic signal control at the Pleasant Valley Road/Racquet Way intersection. With traffic signal control, the intersection would operate acceptably at LOS B or better operation during the AM and PM peak hours.

The CIP includes a line item for unprogrammed traffic signal installation and operational and safety improvements at intersections, including improvements like construction of new traffic signals, construction of turn pockets, and the upgrade of existing traffic signal systems. The County annually monitors intersections with potential need for



improvement through the Intersection Needs Prioritization Process. The Intersection Needs Prioritization Process is then used to inform the annual update to the CIP, and potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

Appropriate mitigation, as determined by the CDA, would include payment of traffic impact mitigation fees to satisfy the project's fair share obligation towards this improvement or construction of the improvement with reimbursement or fee credit for costs that exceed the project's proportional share if the improvement is needed but not included in future updates to the CIP or constructed by others. The project's proportional share of traffic entering the intersection is about 4.5 percent.

OR

- Provide a public road connection to Diamond Road, by way of Black Rice Road, and maintain side street stop control at the Diamond Road/Black rice Road/Lime Kiln Road intersection.

With either of these improvements, this impact would be **less than significant**.

Mitigation 2 - Missouri Flat Road/China Garden Road (Intersection 6) – Implement one of the following improvements:

- Install traffic signal control at the Missouri Flat Road/China Garden Road intersection. With traffic signal control, the intersection would operate acceptably at LOS C or better operation during the AM and PM peak hours.

The CIP includes a line item for unprogrammed traffic signal installation and operational and safety improvements at intersections, including improvements like construction of new traffic signals, construction of turn pockets, and the upgrade of existing traffic signal systems. The County annually monitors intersections with potential need for improvement through the Intersection Needs Prioritization Process. The Intersection Needs Prioritization Process is then used to inform the annual update to the CIP, and potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

Appropriate mitigation, as determined by the CDA, would include payment of traffic impact mitigation fees to satisfy the project's fair share obligation towards this improvement or construction of the improvement with reimbursement or fee credit for costs that exceed the project's proportional share if the improvement is needed but not included in future updates to the CIP or constructed by others. The project's proportional share of traffic entering the intersection is about 1.5 percent.

OR

- Restrict access on the eastbound and westbound approaches to left-in, right-in/right-out only

With either of these improvements, this impact would be **less than significant**.



TABLE 13 PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS WITH MITIGATIONS

Intersection	Control	Existing				Existing Plus Project				Existing Plus Project with Mitigations			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1. Pleasant Valley Road/Racquet Way	SSSC	39	E	191	F	41	E	<u>>300</u>	F	14	B	16	B
6. Missouri Flat Road/China Garden Road (Mitigation – Right-in/Right-out only)	SSSC	49	E	108	F	49	E	<u>111</u>	F	23	C	21	C

Notes: SSSC = side street stop control, AWSC = all way stop control, N/A = Not Applicable (future intersection)

¹ For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For unsignalized (side street stop controlled) intersections, average intersection delay is reported in seconds per vehicle for the overall intersection (worst movement). All results are rounded to the nearest second.

Bold text indicates LOS worse than established threshold. Italic and underlined text identifies a potential impact.

Source: Fehr & Peers, 2015





CUMULATIVE PLUS PROJECT

Cumulative plus project conditions analysis results, presented in Tables 10 and 12, indicate that the addition of the project would exacerbate unacceptable operations at two intersections. The following discusses these impacts and associated mitigations. Table 14 summarizes the AM and PM peak hour intersection operations under cumulative plus project conditions with proposed mitigation.

INTERSECTIONS

Impacts

- Impact 3 - Pleasant Valley Road/Racquet Way (Intersection 1) – This intersection will operate at LOS F without the project during the AM and PM peak hours. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the AM and PM peak hours. **This is a significant impact.**
- Impact 4 - Missouri Flat Road/China Garden Road (Intersection 6) – This intersection will operate at LOS F without the project during the AM and PM peak hours. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the AM and PM peak hours. **This is a significant impact.**
- Impact 5 - Missouri Flat Road/Forni Road (Intersection 12) – This intersection will operate at LOS F without the project during the PM peak hour. According to established significance criteria, the project is projected to “significantly worsen” conditions, since it would add more than 10 trips to the intersection during the AM and PM peak hours. However, the County’s General Plan allows this section of Missouri Flat Road to operate at LOS F up to a v/c ratio of 1.20. The two-way PM peak hour volume for Missouri Flat Road (Mother Lode Drive to Diamond Springs Parkway) is 3,300 vehicles per hour. The peak-hour roadway capacity for a four-lane divided arterial is 3,740 vehicles per hour (El Dorado County General Plan EIR, Table 5.4-1). The resulting v/c ratio is 0.88. As a result, this is not a project impact. **This is a less than significant impact.**

Mitigation

- Mitigation 3 - Pleasant Valley Road/Racquet Way (Intersection 1) – Implement one of the following improvements:
- Install traffic signal control at the Pleasant Valley Road/Racquet Way intersection. With traffic signal control, the intersection would operate acceptably at LOS C and LOS D operation during the AM and PM peak hours, respectively.



The Cumulative analysis includes planned roadway improvements, growth consistent with the 2004 General Plan, and with approved and reasonably foreseeable projects within the study area. This is found to be an impact in the cumulative scenario without the project, which includes other foreseeable but unapproved projects. Therefore, the project is responsible for its proportional share of the proposed mitigation under cumulative conditions. Since the impact is identified under the cumulative scenario, the timing of the improvement is a function of the rate of population and employment growth. The County's traffic impact mitigation fee program provides a mechanism for collecting fair share contributions for improvements in the 2015 CIP.

The CIP includes a line item for unprogrammed traffic signal installation and operational and safety improvements at intersections, including improvements like construction of new traffic signals, construction of turn pockets, and the upgrade of existing traffic signal systems. The County annually monitors intersections with potential need for improvement through the Intersection Needs Prioritization Process. The Intersection Needs Prioritization Process is then used to inform the annual update to the CIP, and potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

Appropriate mitigation, as determined by the CDA, would include payment of traffic impact mitigation fees to satisfy the project's fair share obligation towards this improvement or construction of the improvement with reimbursement or fee credit for costs that exceed the project's proportional share if the improvement is needed but not included in future updates to the CIP or constructed by others. The project's proportional share of traffic entering the intersection is about 3.0 percent.

OR

- Provide a public road connection to Diamond Road, by way of Black Rice Road, and maintain side street stop control at the Diamond Road/Black rice Road/Lime Kiln Road intersection.

With either of these improvements, this impact would be **less than significant**.

Mitigation 4 - Missouri Flat Road/China Garden Road (Intersection 6) – Implementation of one of the following improvements:

- Install traffic signal control at the Missouri Flat Road/China Garden Road intersection. With traffic signal control, the intersection would operate acceptably at LOS C or better during the AM and PM peak hours.

The Cumulative analysis includes planned roadway improvements, growth consistent with the 2004 General Plan, and with approved and reasonably foreseeable projects within the study area. This is found to be an impact in the cumulative scenario without the project, which includes other foreseeable but unapproved projects. Therefore, the project is responsible for its proportional share of the proposed mitigation under





cumulative conditions. Since the impact is identified under the cumulative scenario, the timing of the improvement is a function of the rate of population and employment growth. The County's traffic impact mitigation fee program provides a mechanism for collecting fair share contributions for improvements in the 2015 CIP.

The CIP includes a line item for unprogrammed traffic signal installation and operational and safety improvements at intersections, including improvements like construction of new traffic signals, construction of turn pockets, and the upgrade of existing traffic signal systems. The County annually monitors intersections with potential need for improvement through the Intersection Needs Prioritization Process. The Intersection Needs Prioritization Process is then used to inform the annual update to the CIP, and potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

Therefore, appropriate mitigation, as determined by the CDA, would include payment of traffic impact mitigation fees to satisfy the project's fair share obligation towards this improvement or construction of the improvement with reimbursement or fee credit for costs that exceed the project's proportional share if the improvement is needed but not included in future updates to the CIP or constructed by others. The project's proportional share of traffic entering the intersection is about 1.0 percent.

OR

- Restrict access on the eastbound and westbound approaches to left-in, right-in/right-out only. This is the County's preferred mitigation.

With either of these improvements, this impact would be **less than significant**.

BICYCLE AND PEDESTRIAN CIRCULATION

Implementation of the proposed project will increase demand for pedestrian and bicycle facilities. The project will connect and integrate with existing and planned facilities adjacent to the project as conditioned by the El Dorado County CDA. Therefore, the proposed project will not conflict with adopted policies, plans, or programs related to bicycle and pedestrian facilities, or otherwise decrease the performance or safety of such facilities. **This is a less than significant impact.**

TRANSIT

Implementation of the proposed project will increase demand transit, but at a level consistent with historic population growth rates in El Dorado County. Consequently, the growth in transit demand would not likely exceed the ability to serve this ridership growth through existing funding sources for transit that are tied to population growth. The project is served by the Diamond Springs Line (Routh 30/35) and a bus stop is located within 500 feet of the project. **This is a less than significant impact.**



TABLE 14 PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE PLUS PROJECT CONDITIONS WITH MITIGATIONS

Intersection	Control	Cumulative Plus Project				Cumulative Plus Project with Mitigations			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1. Pleasant Valley Road/Racquet Way (Mitigation – Traffic Signal Control)	SSSC / Signal	<u>>300</u>	<u>F</u>	<u>>300</u>	<u>F</u>	5	A	19	B
6. Missouri Flat Road/China Garden Road (Mitigation – Restricted Access)	SSSC / Signal	<u>F 53</u>	<u>F</u>	E	48	13	B	21	C

Notes: SSSC = side street stop control, AWSC = all way stop control, N/A = Not Applicable (future intersection)

¹ For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For unsignalized (side street stop controlled) intersections, average intersection delay is reported in seconds per vehicle for the overall intersection (worst movement). All results are rounded to the nearest second.

Bold text indicates LOS worse than established threshold. Italic and underlined text identifies a potential impact.

Source: Fehr & Peers, 2015





OTHER CONSIDERATIONS

PEAK HOUR TRAFFIC SIGNAL WARRANT EVALUATION

An evaluation of the need for traffic signal installation was conducted using the peak hour traffic signal warrant methodologies from the California Manual on Uniform Traffic Control Devices, January 2012. The peak hour traffic signal warrant was evaluated for the following existing stop-controlled intersections:

- Pleasant Valley Road/Racquet Way
- Pleasant Valley Road/Pearl Place
- Missouri Flat Road/China Garden Road

Tables 15 displays the results of the peak hour volume warrant for existing plus project and cumulative plus project conditions, respectively. The Pleasant Valley Road/Racquet Way and the Missouri Flat Road/China Garden Road intersections would satisfy the peak hour warrant based on AM and PM peak hour traffic volumes.



**TABLE 15 PEAK HOUR SIGNAL WARRANT
EXISTING PLUS PROJECT AND CUMULATIVE PLUS PROJECT CONDITIONS**

Intersection	Existing Plus Project		Cumulative Plus Project	
	AM	PM	AM	PM
1. Pleasant Valley Road / Racquet Way	Yes	Yes	Yes	Yes
1. Pleasant Valley Road / Pearl Place	No	No	No	No
6. Missouri Flat Road / China Garden Road	Yes	Yes	No	Yes
Source: Fehr & Peers, 2015				

COLLISION HISTORY REVIEW

A review of the County of El Dorado Transportation Division Annual Accident Location Study (2015) was conducted to identify if any study facilities were identified as high accident rate facilities warranting possible investigation. The 2015 Annual Accident Location Study identified Forni Road near Missouri Flat Road for future review for possible improvement by signing and/or delineation. For the three-year period from January 1, 2013 to December 31, 2015, seven collisions were reported on this portion of Forni Road. One of the seven collisions resulted in an injury with three of the seven collisions being broadside collisions. The section of Forni Road has an accident rate of 1.00 accidents per million entering vehicles. The County applies a benchmark as 1.00 accidents per million entering vehicles as the acceptable rate for single sites to select sites for additional action. The project is estimated to add about one trip to the facility during the AM and PM peak hours.

PARKING

The proposed project is providing 190 parking spaces, including 174 standard spaces, four compact spaces, and 12 accessible space. The project is required to provide 174 spaces. Therefore, the project is providing adequate parking.

SITE ACCESS

The project will access two existing roadways, Deuce Drive and Service Drive. Sight distance at the project access points to these roadways is adequate.



**APPENDIX A: INTERSECTION AND ROADWAY COUNTS AND EXISTING
CONDITIONS TECHNICAL CALCULATIONS**



APPENDIX B: EXISTING PLUS PROJECT TECHNICAL CALCULATIONS



APPENDIX C: CUMULATIVE NO PROJECT TECHNICAL CALCULATIONS



APPENDIX D: CUMULATIVE PLUS PROJECT TECHNICAL CALCULATIONS



APPENDIX E: MITIGATION TECHNICAL CALCULATIONS



APPENDIX F: SIGNAL WARRANT ANALYSIS

